



# 2008 NCDOT ANNUAL PERFORMANCE REPORT

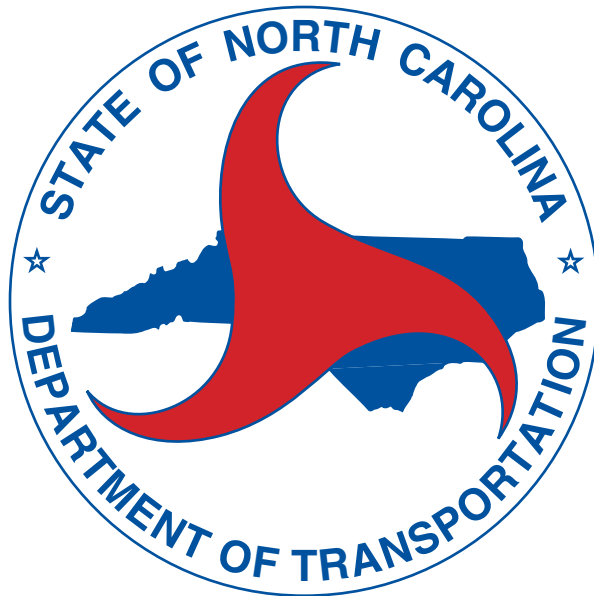


Connecting people and places in North Carolina - safely and efficiently, with accountability and environmental sensitivity

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## Secretary's Message

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Dear Citizens of North Carolina:

I am pleased to present to you the first annual N.C. Department of Transportation performance report. It is a synopsis of NCDOT's activities during Fiscal Year 2008 and is organized around our strategic goals. It provides highlights of key initiatives and includes performance measures for all business services.

This has been a year of dramatic change for NCDOT. Rapid population growth, rising construction costs and fuel prices, the changing travel habits of North Carolinians, and other factors have demanded changes in the way this department approaches its mission. Starting in mid 2007, I designated a team of key department employees to begin a transformation of our operations based on the findings of a diagnostic conducted by McKinsey and Company. This transformation to a 21st Century DOT, discussed in more detail at [www.ncdot.gov](http://www.ncdot.gov), will position us to better meet the transportation demands of this state with an emphasis on safety, mobility, preservation, accountability, and environmental sensitivity.

The Division of Motor Vehicles began two major new initiatives in 2008 – central issuance of drivers licenses and e-sticker inspections. Instead of issuing driver licenses at its field offices, DMV is producing licenses, permits and identification cards at a central location and mailing them to customers to combat license fraud and ID theft in the state. The division is also changing the date of your vehicle inspection, so the inspection must occur before you will be allowed to renew your registration each year. This will decrease the number of cars skipping inspections and help improve safety and air quality.

With limited options for growing our highway system, NCDOT is focused on achieving maximum performance of our existing network and increasing support for other modes of travel. Public transportation rose dramatically statewide and NCDOT provided significant support for these systems throughout the state. This included investment in the successful new Charlotte light rail system and approval to add a new service route to the Piedmont rail line. NCDOT also began use of innovative financing in the form of Grant Anticipation Revenue Vehicle (GARVEE) Bonds to accelerate needed safety and mobility improvements on its most traveled roads.

While I am always proud to lead the 14,000 gifted, dedicated and professional employees of this agency, this past year has been particularly gratifying. I invite you to review this report and see how NCDOT is addressing the challenges facing North Carolina to meet the state's transportation needs for the 21st Century.

Sincerely,

Lyndo Tippet  
North Carolina Secretary of Transportation

# NCDOT

## OUR MISSION

*Connecting people and places  
in North Carolina – safely and  
efficiently, with accountability  
and environmental sensitivity*

## OUR GOALS

- Make our transportation network **safer**
- Make our transportation network move people and goods more **efficiently**
- Make our infrastructure **last longer**
- Make our organization a place that **works well**
- Make our organization **a great place to work**



# NCDOT

## OUR VALUES

- **SAFETY** - We strive for safety throughout our transportation networks as well as in our work and our daily lives.
- **CUSTOMER SERVICE** - We respond to our customers, both internal and external, in an open, professional and timely manner.
- **INTEGRITY** - We earn and maintain trust by responsibly managing the states assets, acting ethically, and holding ourselves accountable for our actions.
- **DIVERSITY** - We draw strength from our differences and work together in a spirit of teamwork and mutual respect.
- **QUALITY** - We pursue excellence in delivering our projects, programs, services and initiatives.





# I. Introduction

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## Introduction

In fiscal year 2007-08, the North Carolina Department of Transportation (NCDOT) initiated a transformation to become a results-based organization that more effectively measures and reports its organizational and individual performance. To achieve this, NCDOT has redefined its mission, goals, performance measures and measurement systems, operation plans, organization, budgets and processes.

To improve organizational effectiveness and meet the requirement of the Current Operations and Capital Improvements Appropriations Act of 2008, Section 25.4, NCDOT has identified 29 performance measures directly linked to the success of achieving our mission and five goals. To ensure success of each measure, NCDOT identified specific targets for achievement. Some measurement systems and reporting tools are further along, while others require additional attention and the development of new methods of measuring and reporting.

A Web-based performance “dashboard” has been created to continually exhibit the performance of the Department and may be found at <http://ncdot.gov/programs/dashboard/>. When fully implemented the performance dashboard will display current results for each Department goal and their key measurements. This annual performance report summarizes the current dashboard results and includes additional key measures that are critical in measuring organizational performance, but not yet published on the dashboard.

Although the transition to a performance measurement culture began recently, NCDOT has made considerable progress in achieving its measures and targets by demonstrating its performance through the delivery of projects, programs, services and initiatives that meet our mission, goals and values. This report highlights many of those examples and includes details on Department successes in the last fiscal year.

NCDOT is committed to continually improving our programs, projects and services through performance measures, processes, goals and targets that meet the needs of North Carolina, its citizens and the traveling public. More refined and transparent organizational measures will lead to better decision-making and a more results-oriented Department of Transportation.

## II. Key Accomplishments

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### Key Accomplishments in Fiscal Year 2008

- ✓ Realigned NCDOT to improve performance and accountability
- ✓ Completed 168 major projects and awarded \$850 million in new contracts
- ✓ Initiated contracts to rehabilitate/replace 133 bridges
- ✓ Constructed and/or rehabilitated 1,698 miles of road
- ✓ Used 860,699 tons of reclaimed/recycled asphalt pavement in production
- ✓ Decreased the expected growth of annual vehicle miles traveled by 75 percent since 2000, surpassing the goal of 25 percent by 2009. Public transportation ridership is expected to greatly increase this year due to:
  - The increase in frequency of passenger rail service between Raleigh and Charlotte by adding an additional train
  - The support for the LYNX Blue Line, Charlotte Area Transit System's light rail service
- ✓ Implemented major program changes at the Division of Motor Vehicles including:
  - Central issuance of driver licenses to prevent fraud and theft
  - Electronic Inspection Program to increase vehicle safety inspection compliance and improve air quality
  - Vertical license issuance for drivers under the age of 21 to curb under age drinking and driving
- ✓ Firms certified as Disadvantaged Business Enterprises, Minority Business Enterprises, and Women Business Enterprises were paid \$360,151,233 on federally-assisted and state-funded projects for a total of 17.3 percent of the dollars paid out in FY08
- ✓ Firms certified as Small Business Enterprises were awarded \$58,182,146 and paid \$70,366,096 in department wide contracts

### III. Dashboard & Financial Snapshots

## NCDOT Executive Dashboard



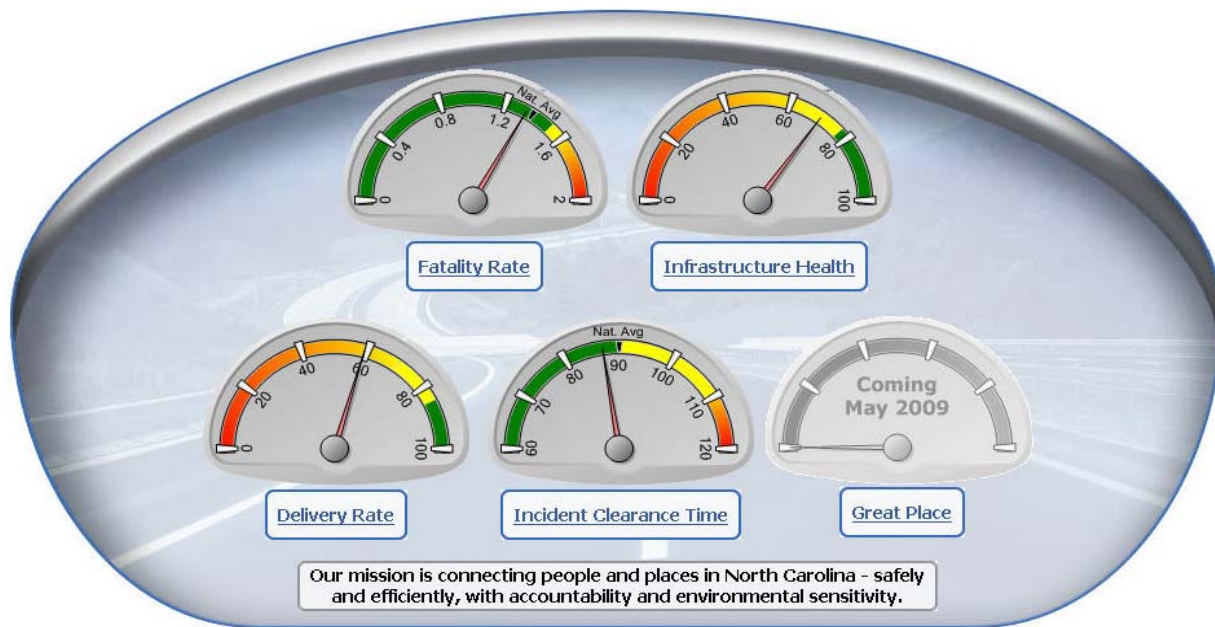
#### Executive Dashboard Report:

Real Time Data as of 11/01/08

Dashboard Data Based on Calendar Year to Date

Lyndo Tippet  
Transportation Secretary

Department Goal	Dashboard Performance Metric	Metric Results / Status
Make our transportation network safer	Fatality Rate	The current calendar year to date statewide fatality rate is 1.33 per 100 million vehicle miles traveled
Make our infrastructure last longer	Infrastructure Health Index	70% of our highway systems infrastructure is rated in good or excellent condition
Make our organization a place that works well	Delivery Rate	59% of construction projects are on schedule and within budget
Make our transportation network move people and goods more efficiently	Incident Clearance Time	Overall average incident clearance time for major accidents is 86 minutes
Make our organization a great place to work	Employee Engagement Rate (proposed)	Performance gauge will be launched by May 1, 2009



[More information on NCDOT's transformation and organizational performance efforts.](#)



# NCDOT Finances

Select Financial Report:

SFY08: YTD Thru June 30 2008

Mark L Foster  
Chief Financial Officer

## NCDOT Financial Performance

Receipts		Expenses		Purchasing Power														
Planned to Actual Receipts		Planned to Actual Expenses		<div><p>Purchasing Power of NCDOT Highway Construction Dollars (Since 2002)</p><table><caption>Purchasing Power Data (Estimated from Graph)</caption><thead><tr><th>Year</th><th>Purchasing Power (%)</th></tr></thead><tbody><tr><td>2002</td><td>0%</td></tr><tr><td>2003</td><td>-8%</td></tr><tr><td>2004</td><td>-26%</td></tr><tr><td>2005</td><td>-33%</td></tr><tr><td>2006</td><td>-43%</td></tr><tr><td>2007</td><td>-47%</td></tr></tbody></table></div>	Year	Purchasing Power (%)	2002	0%	2003	-8%	2004	-26%	2005	-33%	2006	-43%	2007	-47%
Year	Purchasing Power (%)																	
2002	0%																	
2003	-8%																	
2004	-26%																	
2005	-33%																	
2006	-43%																	
2007	-47%																	
Planned	\$4,083,000,000	Planned	\$4,236,000,000															
Actual	\$3,966,500,000	Actual	\$3,954,500,000															
Variance	-2.9%	Variance	-6.6%															

Forecast to Actual					
Receipts		Expenses		Agency Transfers	
State	\$2,887,718,885	Construction	\$1,917,798,261	Direct Transfers:	
Federal	\$857,720,402	Maintenance	\$849,668,077	General Fund	\$190,733,306
Debt	\$114,430,648	Transit	\$201,956,280	Highway Patrol	\$199,009,403
Local	\$53,378,953	Debt Service	\$93,193,815	Public Instruction	\$53,749,002
Grants	\$53,205,216	Admin	\$250,796,488	Other Agencies	\$16,836,177
<b>Total</b>	<b>\$3,966,454,104</b>	Transfers	\$460,327,888	<b>Total</b>	<b>\$460,327,888</b>
		State Aid & Other	\$180,761,439		
		<b>Total</b>	<b>\$3,954,502,248</b>		
Forecast	\$4,083,000,000	Forecast	\$4,236,000,000	NC Turnpike Support:	
Variance	<b>\$(116,545,896)</b>	Variance	<b>\$(281,497,752)</b>	Admin	\$3,649,397
Variance %	<b>-2.9%</b>	Variance %	<b>-6.6%</b>	Construction	\$16,604,487
				<b>Total</b>	<b>\$20,253,884</b>

## IV. Key Performance Measures

### Key Performance Measures

#### Make our transportation network **safer**

	Metric	Defined Measure	Target	FY08 Result
1.1	Fatality Rate	Rate of Fatalities per 100 Million Vehicle Miles	Less than 1.63	1.53
1.2	Crash Rate	Rate of Crashes per 100 Million Vehicle Miles	Less than 233.76	230.75
1.3	Injury Rate	Rate of Injuries per 100 Million Vehicle Miles	Less than 115.56	112.37
1.4	Traffic Safety	% of Statewide Safety Belt Usage	90% or Greater	89.8%
1.5	Motor Vehicle Safety	Number of centrally issued driver licenses reducing fraudulent drivers	TBD	TBD

#### Make our transportation network move people and goods more **efficiently**

	Metric	Defined Measure	Target	FY08 Result
2.1	Highway Reliability	% of Strategic Highway Corridor Miles that have Little or No Recurring Congestion	85% or Greater	81%
2.2	Ferry Service Reliability	% of Scheduled Ferry Runs Completed	97% or Greater	98.9%
2.3	Incident Management	Average Time to Clear a Major Accident	Less than 90 minutes	90.4 minutes
2.4	Public Transportation	% Reduction in Expected Growth of Commuter Generated Vehicle Miles Traveled	25% or Greater	75%
2.5	Rail Service	% Increase in the Number of Intercity Rail Passengers	3% or Greater	6%

#### Make our infrastructure **last longer**

	Metric	Defined Measure	Target	FY08 Result
3.1	Pavement Condition: Interstate Routes	% of Interstate Route Miles in Good Condition	85% or Greater	78.4%
3.2	Pavement Condition: Primary Routes	% of Primary Route Miles in Good Condition	80% or Greater	65.3%
3.3	Pavement Condition: Secondary Routes	% of Secondary Route Miles in Good Condition	75% or Greater	67.6%
3.4	Bridge Health Index	% of Bridges in Good Condition	76% or Greater	67.2%
3.5	Maintenance Condition – Highway Features	Weighted score of all Highway Features, Excluding Pavement and Bridges, in Acceptable Condition	84 or Greater	79.3

#### Make our organization a place that **works well**

	Metric	Defined Measure	Target	FY08 Result
4.1	Letting Success Rate	% of Projects "Advertised for Bid" and Awarded to the Contractor for Construction on Schedule	70% or Greater	67%
4.2	Right Of Way Delivery	% of Projects that Completed Right of Way on Schedule	70% or Greater	72%
4.3	Construction Project Delivery – On Schedule	% of Active Highway Construction Projects on Schedule	70% or Greater	88%
4.4	Construction Project Delivery – On Budget	% of Active Highway Construction Projects on Budget	70% or Greater	63%
4.5	Environment Stewardship	Average Environmental Inspection Score for Construction and Maintenance Projects Statewide	7.5 or Greater	8.5
4.6	Administrative Costs	% of Administrative Costs compared to Overall Budget	Less than 10%	6.5%
4.7	Federal Billing Efficiency	% of Federal Receipts to Eligible Authority to Bill	95% or Greater	100%
4.8	Cash Management	% of Planned Expenses to Actual Receipts	+/- 5%	4.75%
4.9	DMV Service Delivery	% of Offsite DMV Services Compared to Onsite Services	TBD	TBD
4.10	DMV Service Delivery	Average Time a Customer has to Wait Before Receiving Services at a DMV Office	TBD	TBD

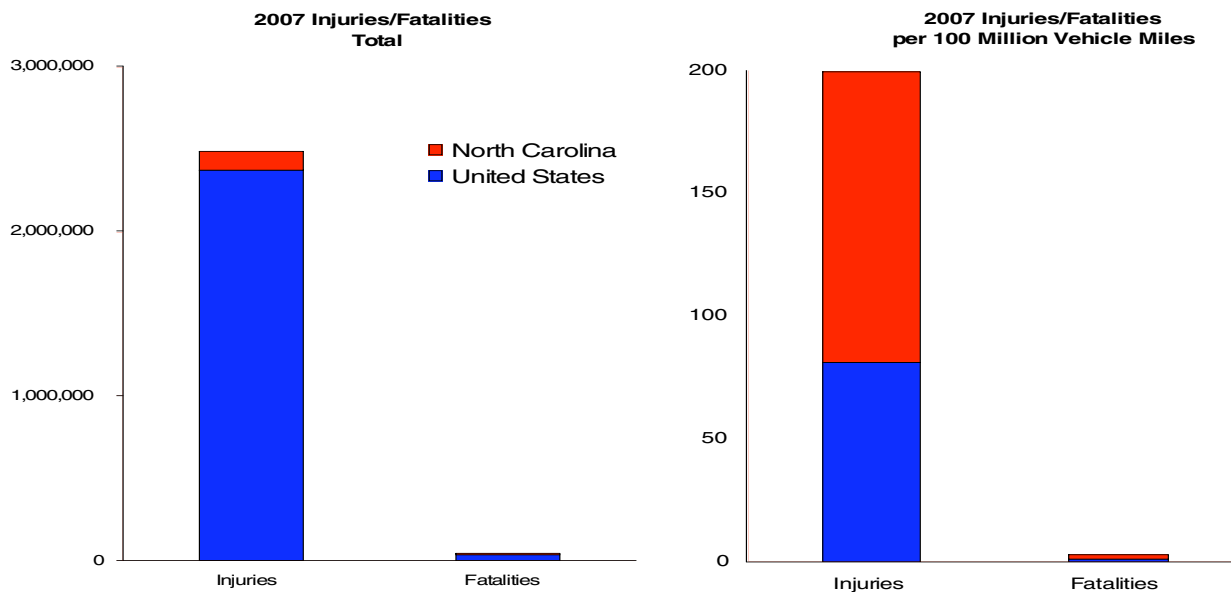
#### Make our organization a **great place** to work

	Metric	Defined Measure	Target	FY08 Result
5.1	Employee Safety	Employee Safety Index	Less than 9.79	6.35
5.2	Employee Hiring Process	Total Average Time to Hire Staff	TBD	TBD
5.3	Employee Engagement	% of employees that feel the Department is a great place to work	TBD	TBD
5.4	Metrics Based Performance Evaluations	% of NCDOT Leadership Positions Under New Results Based Performance Management System	100%	100%

## V. Performance Measures Details

### Make our transportation network safer

NCDOT has established five organizational performance measures for the goal of making our transportation network safer. In addition, there are “indicators” that are financial and non-financial statistical information used to help NCDOT define and gauge progress toward common standards. These are not performance measures because the department has not yet identified specific goals or targets to achieve. A key indicator for this goal is comparing North Carolina data to national highway safety measures.



Key Measures – Transportation Network Safety		
1.1	Fatality Rate	Rate of Fatalities per 100 Million Vehicle Miles
1.2	Crash Rate	Rate of Crashes per 100 Million Vehicle Miles
1.3	Injury Rate	Rate of Injuries per 100 Million Vehicle Miles
1.4	Traffic Safety	% of Statewide Safety Belt Usage
1.5	Motor Vehicle Safety	Number of centrally issued driver licenses reducing fraudulent drivers (future reportable measure)

## Measure 1.1 – Statewide Highway Fatality Rate

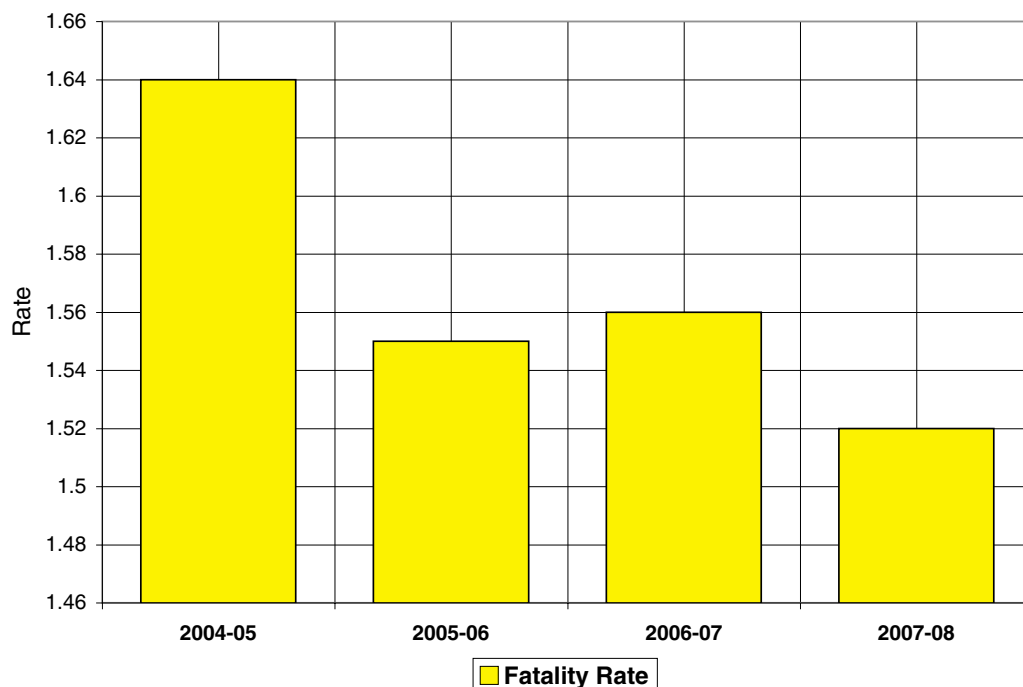
**Background:** The fatality rate is calculated as the number of fatalities per year divided by Vehicle Miles Traveled in 100 millions. The acronym VMT (100MVM) is used for displaying the vehicle miles traveled with a scale of 100 million vehicle miles. For example, there were 1585 fatalities on North Carolina roads in 2007-08, and 103,398 Million Vehicle Miles were traveled on our roads in that same time period, which equals 1,035.98 100MVM. Therefore the fatality rate for 2007-08 is: 1,585 divided by 1,035.98 which is equal to 1.53 fatalities per 100MVM traveled. The data is sourced from the Division of Motor Vehicles Crash Database.

**Objective:** NCDOT has established a target range for the fatality rate as 1.63 or lower. A fatality rate value below 1.63 meets or exceeds expectations.

**Results:** The table includes the total number of fatalities on North Carolina roads for the fiscal year. The table is accompanied by a trend chart of the total number of fatalities by year. This chart is based on the data displayed in the yearly statistics table in the row labeled fatalities. Based on the table, the current trend for the fatality rate has declined. The fatality rate compares the current year to date fatalities with the VMT. In 2008, NCDOT met its target rate of 1.63.

Additional information, including real time fatality data and chart details for all 100 North Carolina counties, can be found on NCDOT's Performance Dashboard at: <http://www.ncdot.org/programs/dashboard/>.

North Carolina	2004-05	2005-06	2006-07	2007-08
Fatality Rate	1.64	1.55	1.57	1.53
VMT (100MVM)	982.44	1,012.55	1,026.23	1,035.98
Fatalities	1,616	1,572	1,611	1,585



## Measure 1.2 – Statewide Highway Crash Rate

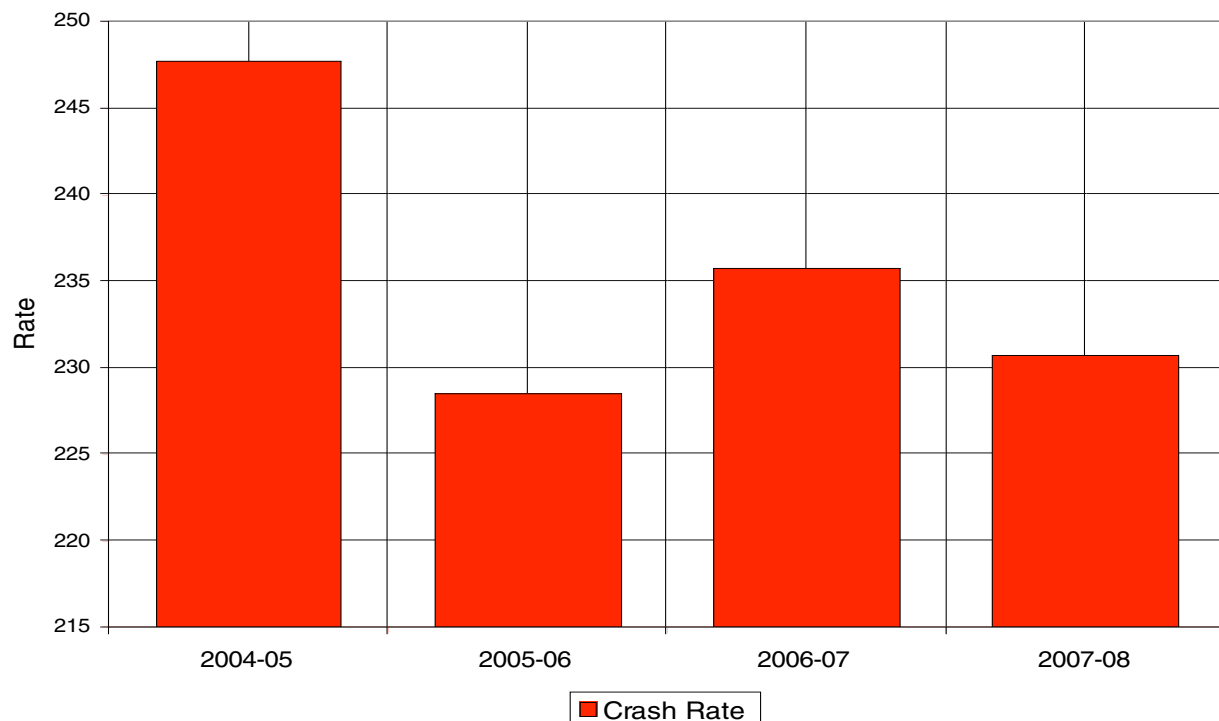
**Background:** The crash rate is calculated as the number of crashes per year divided by Vehicle Miles Traveled in 100 millions. The acronym VMT (100MVM) is used for displaying the vehicle miles traveled with a scale of 100 million vehicle miles. In 2007-2008 there were 239,049 crashes on North Carolina roads, and 103,598 Million Vehicle Miles were traveled on North Carolina roads for that time period, which equals 1,035.98 100MVM. Therefore the crash rate for 2006 is: 239,049 divided by 1,035.98 which is equal to 230.75 crashes per 100MVM traveled. The data is sourced from the Division of Motor Vehicles Crash Database.

**Objective:** NCDOT has established an overall reduction in the crash rate as its target. A crash rate value below last year's value of 235.73 meets or exceeds expectations.

**Results:** The table includes the total number of crashes on North Carolina roads for the fiscal year. The table is accompanied by a trend chart of the total number of crashes by year. This chart is based on the data displayed in the yearly statistics table in the row labeled crashes. Based on the table, the current trend for the crash rate has declined. The rate compares the current year to date crashes with the VMT. In 2008, NCDOT met its target rate of 235.73.

Additional information, including real time crash data and chart details for all 100 North Carolina counties, can be found at <http://www.ncdot.org/programs/dashboard/>.

North Carolina	2004-05	2005-06	2006-07	2007-08
<b>Crash Rate</b>	247.67	228.48	235.73	230.75
<b>VMT (100MVM)</b>	982.44	1,012.55	1,026.23	1,035.98
<b>Crashes</b>	243,323	231,349	241,912	239,049



### Measure 1.3 – Statewide Highway Injury Rate

**Background:** The injury rate is calculated as the number of injuries per year divided by Vehicle Miles Traveled (VMT) in 100 Millions. The acronym VMT (100MVM) is used for displaying the vehicle miles traveled with a scale of 100 Million Vehicle Miles. For example, there were 116,414 injuries on North Carolina roads in 2007-08, and 103,598 Million Vehicle Miles were traveled on North Carolina roads in that same time period, which equals 1,035.98 100MVM. Therefore the crash rate for 2006 is: 116,414 divided by 1,035.98 which is equal to 112.37 injuries per 100MVM traveled. The data is sourced from the Division of Motor Vehicles Crash Database.

**Objective:** NCDOT has established an overall reduction in the injury rate as its target. An injury rate below last year's value of 115.56 meets or exceeds expectations.

**Results:** The table includes the total number of injuries on North Carolina roads for the fiscal year. The table is accompanied by a trend chart of the total number of injuries by year. The number of injuries includes severe (Class A) and moderate (Class B) injuries only. This chart is based on the data displayed in the yearly statistics table in the row labeled injuries. Based on the table, the current trend for the injury rate has declined. The rate compares the current year to date crashes with the VMT. In 2008, NCDOT met its target rate of 117.76.

Additional information, including real time injury data and chart details for all 100 North Carolina counties can be found at <http://www.ncdot.org/programs/dashboard/>.

North Carolina	2004-05	2005-06	2006-07	2007-08
Injury Rate	132.79	118.93	117.76	112.37
VMT (100MVM)	982.44	1,012.55	1,026.23	1,035.98
Injuries	130,455	120,424	120,853	116,414





## Measure 1.4 – Statewide Safety Belt Usage Percentage

**Background:** North Carolina's goal for vehicle occupant protection is to increase safety belt use through education and enforcement. NCDOT strives to increase the statewide safety belt usage rate by:

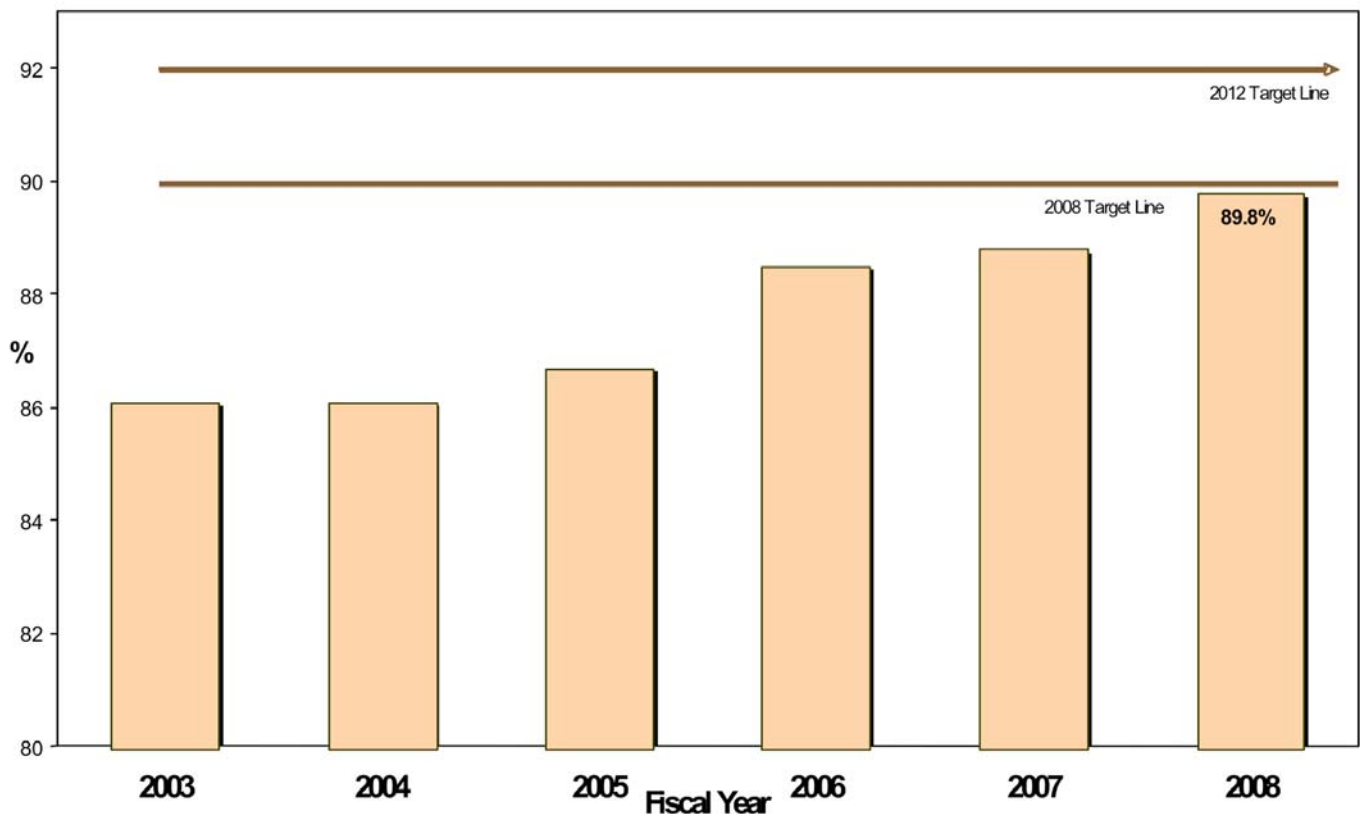
- Decreasing fatalities from non-restraint use from 534 in 2006 to less than 500
- Increasing usage rates among the 16 to 24 year-old-age group
- Increasing the usage rate among male drivers

**Objective:** NCDOT strives to increase the statewide safety belt usage rate from 89.8 percent to 92 percent by 2012.

**Results:** In fiscal year 2008 NCDOT established a target of 90 percent. North Carolina fell just short of its target and achieved a statewide safety belt rate of 89.8 percent.

Fiscal Year	Percent Usage		Fiscal Year	Percent Usage
2002-2003	86.1		2006-2007	88.8
2003-2004	86.1		2007-2008	89.8
2004-2005	86.7		2008-09 Target	90.0
2005-2006	88.5		2011-2012 Target	92.0

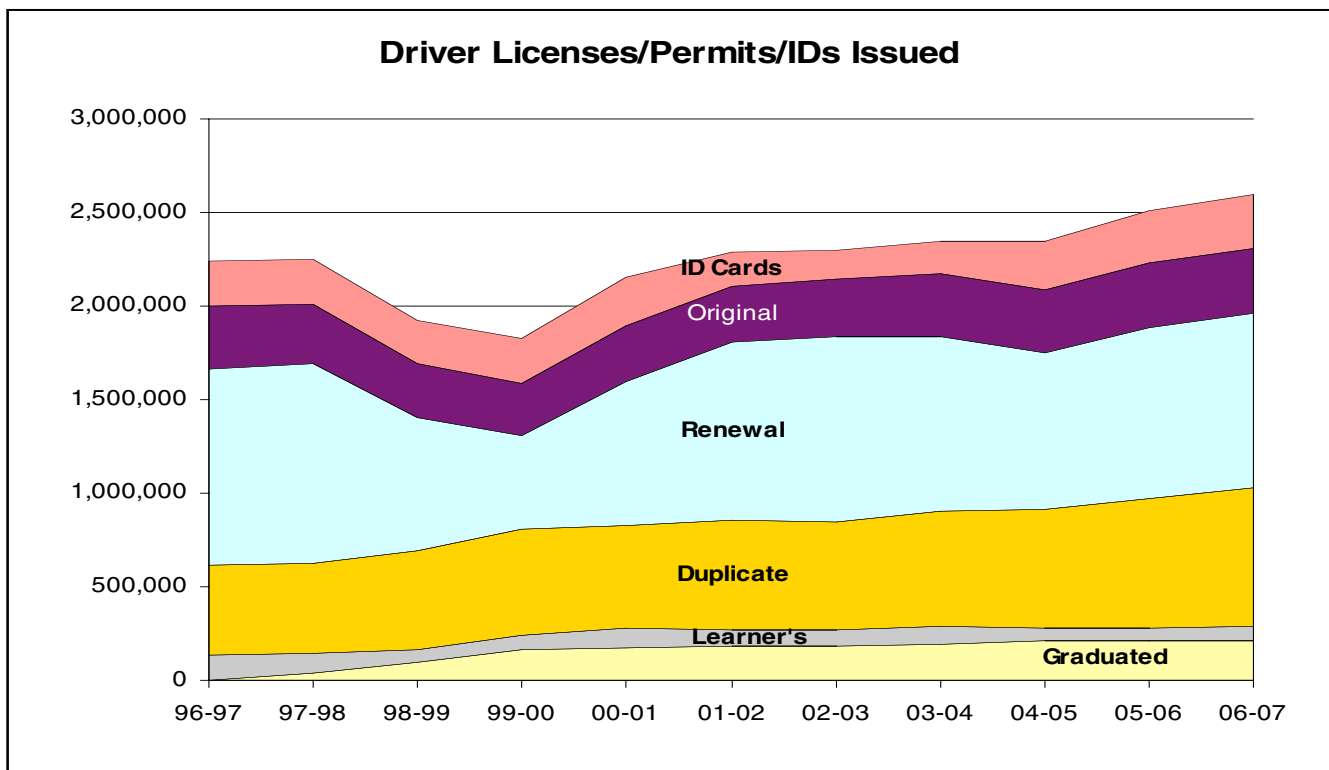
North Carolina Safety Belt Usage



## Measure 1.5 – Motor Vehicle Safety: Number of Centrally Issued Driver Licenses Reducing Fraudulent Drivers

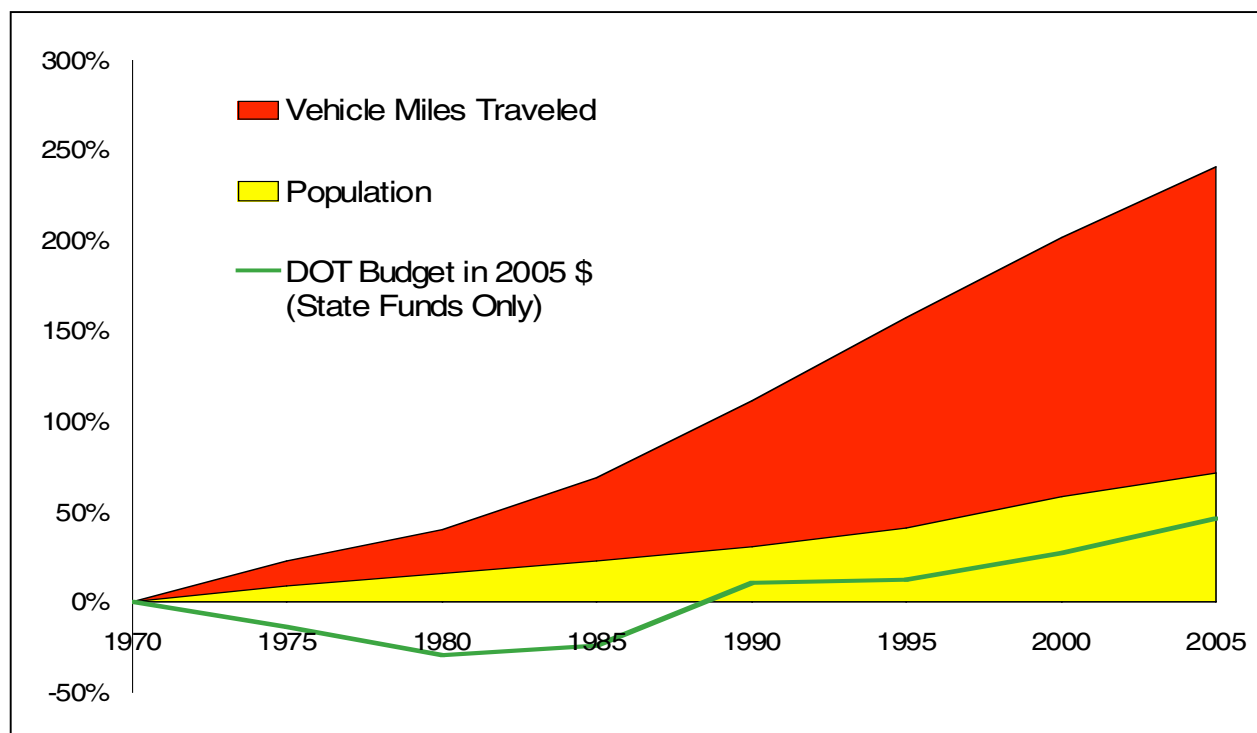
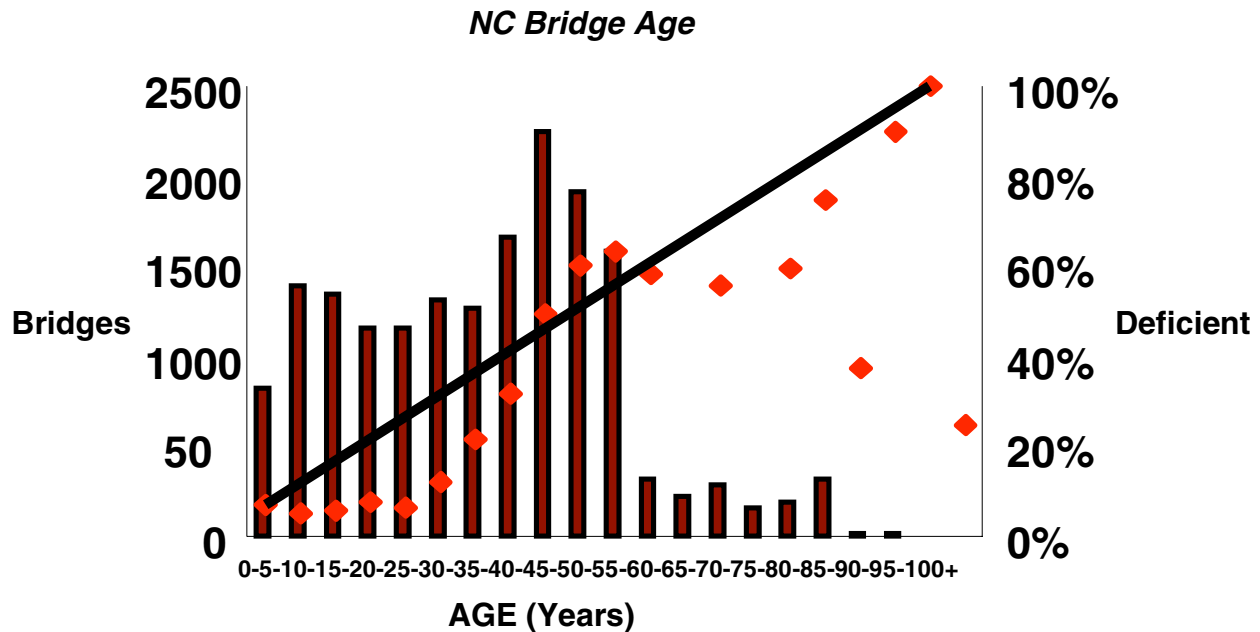
**Background:** The Division of Motor Vehicles began central issuance of driver licenses and identification cards on July 1, 2008. Central issuance provides staff more time to fully investigate questionable documents and verify them with their issuing agencies. It also provides the most efficient way of assuring a secure license production facility. DMV is procuring a new license production system which will incorporate required features such as front-end capture of customer's digital image; document scanning of all customer documents; connections to databases such as Systematic Alien Verification for Entitlements (SAVE) and Student and Exchange Visitor Information System (SEVIS) for aliens; use of tamper-proof materials, etc.

**Results:** DMV processes an average of 300 transactions daily that involve verification of legal presence documents.



# Make our transportation network move people and goods more efficiently

NCDOT has established five organizational performance measures for the goal of making our transportation move people and goods more efficiently. In addition, there are “indicators” that are financial and non-financial statistical information used to help NCDOT define and gauge progress toward common standards. These are not performance measures because the department has not yet identified specific goals or targets to achieve. A key indicator for this goal is reviewing North Carolina’s bridge age and population growth and vehicle miles traveled compared to allocated state funds.



<b>Key Measures – Moving People and Goods More Efficiently</b>		
2.1	Highway Reliability	% of Strategic Highway Corridor Miles that have Little or No Recurring Congestion
2.2	Ferry Service Reliability	% of Scheduled Ferry Runs Completed
2.3	Incident Management	Average Time to Clear a Major Accident
2.4	Public Transportation	% Reduction in Expected Growth of Commuter Generated Vehicle Miles Traveled
2.5	Rail Service	% Increase in the Number of Intercity Rail Passengers

## Measure 2.1 – Percent of Strategic Highway Corridor Miles that have Little or No Recurring Congestion

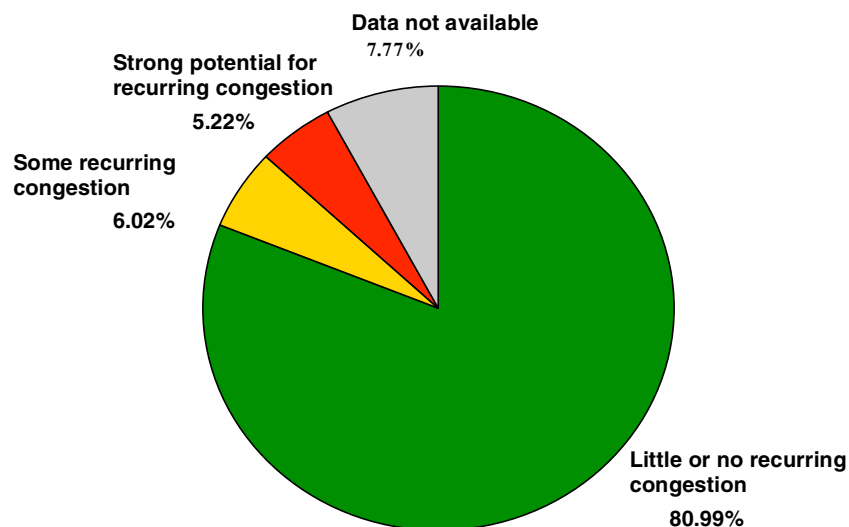
**Background:** Recurring congestion is congestion caused by routine traffic volumes operating in a typical environment. This type of congestion is primarily based on the physical characteristics of the highway including the number of lanes and traffic signals and does not account for incidents such as crashes, bad weather and road work. Highway recurring congestion data is calculated using volume-to-capacity ratios. The volume data is based on 2007 traffic counts (AADT) along sections of the highways. AADT is the acronym for Average Annual Daily Traffic, which is the traffic volume for all lanes in both directions passing a point on the highway system. It represents the average of all days during the year with typical traffic conditions. The capacities are based on July 2008 highway geometric data and conditions such as the number of lanes, number of traffic signals, percent of trucks and speed limit. Capacities are developed using the North Carolina Level of Service program, which is a software program developed by N.C. State University based on the Transportation Research Boards Highway Capacity Manual. The volume-to-capacity ratios are computed by taking the volumes for each section and dividing it by the capacity of that section.

The ratios are used to classify the likelihood of recurring congestion on the highway.

**Objective:** NCDOT has established an overall improvement in reducing congestion as its target. The current target is 85 percent or greater of Strategic Highway Corridor miles should be functioning with little or no recurring congestion.

**Results:** The pie chart indicates that 81 percent of North Carolina's Strategic Highway Corridors are functioning with little or no potential for recurring congestion, 6 percent are functioning with some potential for recurring congestion, and a little more than 5 percent have a strong potential for recurring congestion. Data is not available for a little less than 8 percent of the Strategic Highway Corridors, primarily due to insufficient traffic counts along section of highway (some of which may have recently opened, such as the US 70 Clayton Bypass). Based on this data, NCDOT has met its target.

**Likelihood of Recurring Congestion on North Carolina's Strategic Highway Corridors**



## Measure 2.2 – Percent of Scheduled Ferry Runs Completed

**Background:** Ferry service reliability is a critical component of moving people and goods along the coast of North Carolina. In doing so, the NCDOT Ferry Division must meet its customer needs when fulfilling its responsibilities. The NCDOT Ferry Division schedules over 75,000 trips per year. This measure evaluates the success rate of each ferry in accomplishing its daily scheduled runs.

**Objective:** NCDOT has established a target that 97 percent or more of all scheduled ferry trips shall be completed as planned.

**Results:** In fiscal year 2008, NCDOT met its target by completing 97.8 percent of its scheduled ferry runs on schedule. The most common causes for delay or cancellation of trips were weather-related issues.

FERRY DIVISION 2007-08 FISCAL YEAR TOTALS						
FACILITY	SCHEDULED RUNS	MISSED RUNS	WEATHER	MECHANICAL	OTHER*	% OF COMPLETED SCHEDULED RUNS
CEDAR ISLAND	1,892	163	26	137	0	91.38
CHERRY BRANCH	24,090	390	267	49	74	98.38
CURRITUCK	7,680	379	223	108	48	95.07
HATTERAS	19,665	94	92	0	2	99.52
OCRACOKE	2,808	83	25	58	0	97.04
PAMLICO RIVER	8,030	147	145	2	0	98.17
SOUTHPORT	10,860	360	137	220	3	96.69
SWAN QUARTER	916	51	6	45	0	94.43
TOTALS:	75,941	1,667	921	619	124	97.81

\*Other: dredging, USCG, etc.



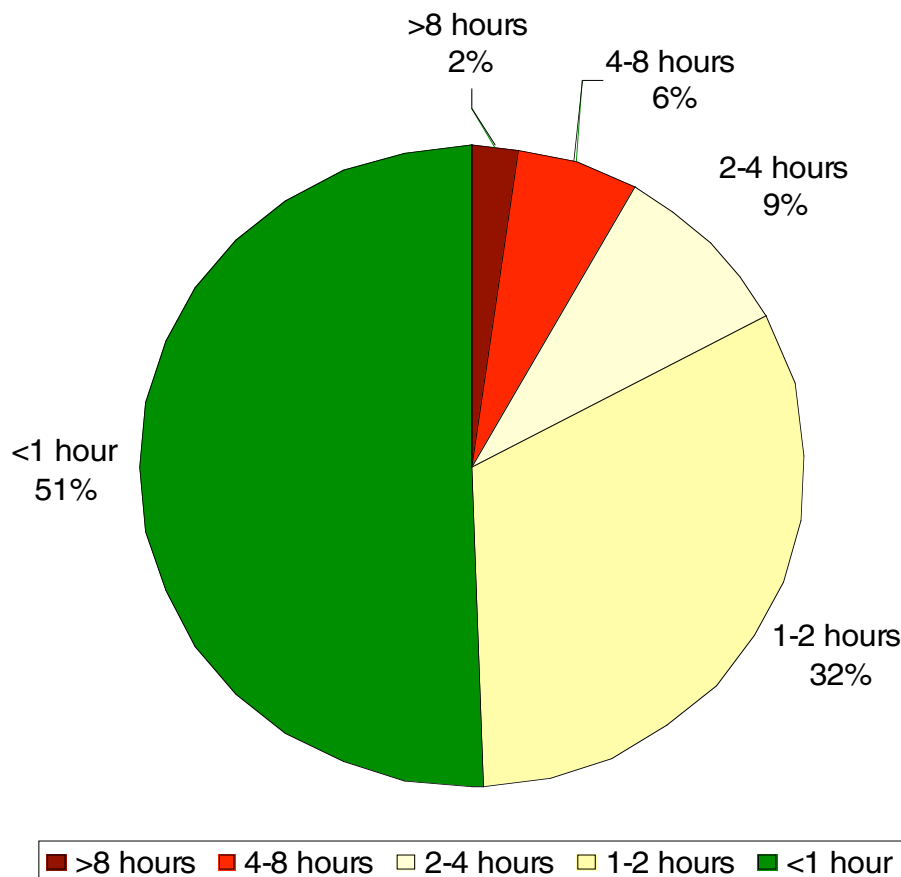
### Measure 2.3 – Average Time to Clear a Major Accident

**Background:** Highway congestion can be categorized into either recurring congestion such as rush hour traffic and non-recurring congestion including congestion caused by accidents, weather and work zones. National studies show that over half of all congestion is non-recurring. Clearing accidents from roadways quickly decreases the congestion that results from a major accident. The graph below depicts the average time it takes to clear a major accident—one that causes significant or unusual delays from a North Carolina highway. This data is from NCDOT's Traveler Information Management System (TIMS), which includes real time traffic information from across the state. TIMS can be found at [www.ncdot.gov/traffictravel/](http://www.ncdot.gov/traffictravel/).

**Objective:** NCDOT has established a target of 90 minutes or less, which is also the national goal for incident clearance. Cooperation with local and state law enforcement and emergency response agencies is essential to meet this target.

**Results:** In fiscal year 2008, there were 1,839 major incidents reported on highways in North Carolina. The average time to clear those accidents was 90.44 minutes. In addition, over half of all incidents were cleared within one hour.

INCIDENT CLEARANCE TIMES					
Clearance time	<1 hour	1-2 hours	2-4 hours	4-8 hours	>8 hours
Number of Incidents	931	592	166	107	43
Percent	51%	32%	9%	6%	2%

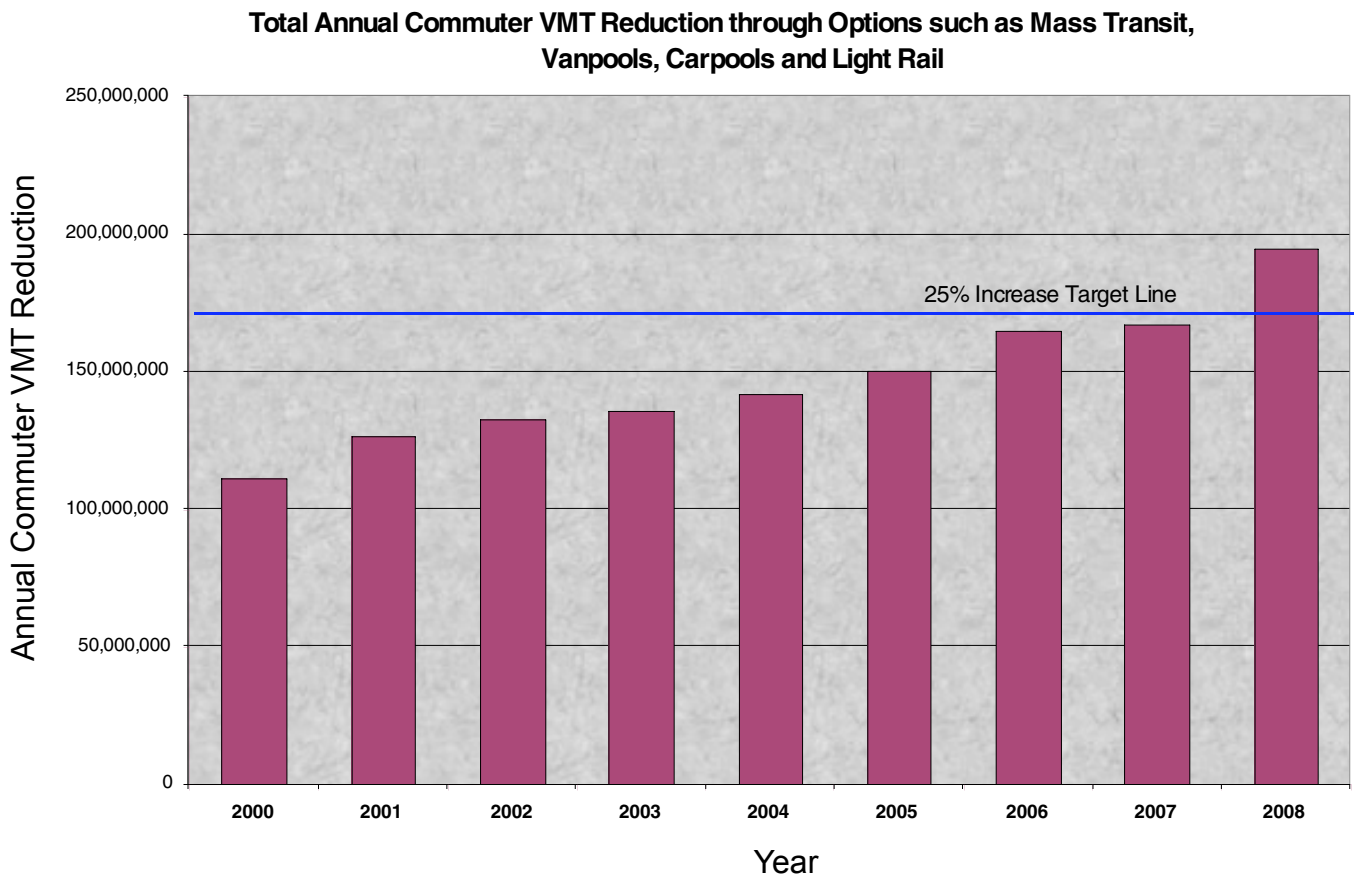


## Measure 2.4 – Percent Reduction in Expected Growth of Commuter Generated Vehicle Miles Traveled

**Background:** Session Law 1999-328, The Ambient Air Quality Improvement Act, established statewide goals for reducing the growth of vehicle miles traveled in the state. The legislation directed NCDOT to develop a plan to reduce VMT growth by 25 percent by July 1, 2009, focusing on job-related travel.

**Objective:** The goal established by Senate Bill 953 is a 25 percent reduction in the projected growth of VMT by 2009.

**Results:** From 2000 to 2007, with commuter trips being accommodated in carpools, vanpools and transit, daily commuter VMT increased by 12,811,040 VMT. From 2000 to 2007, with commuter trips not being accommodated in these alternative modes, daily commuter VMT would have increased by 15,908,080 VMT, representing a 24 percent reduction in projected growth of commuter VMT. The use of alternative modes to commute to work, including carpools, vanpools, transit and most recently light rail service, the total reduction in the projected growth of VMT from 2000 to 2008 was 75 percent an additional 50 percent reduction in the last fiscal year alone. Record fuel prices, expansion of local transit service and implementation of light rail service in Charlotte have contributed to our ability to greatly exceed the goal of 25 percent by 2009.



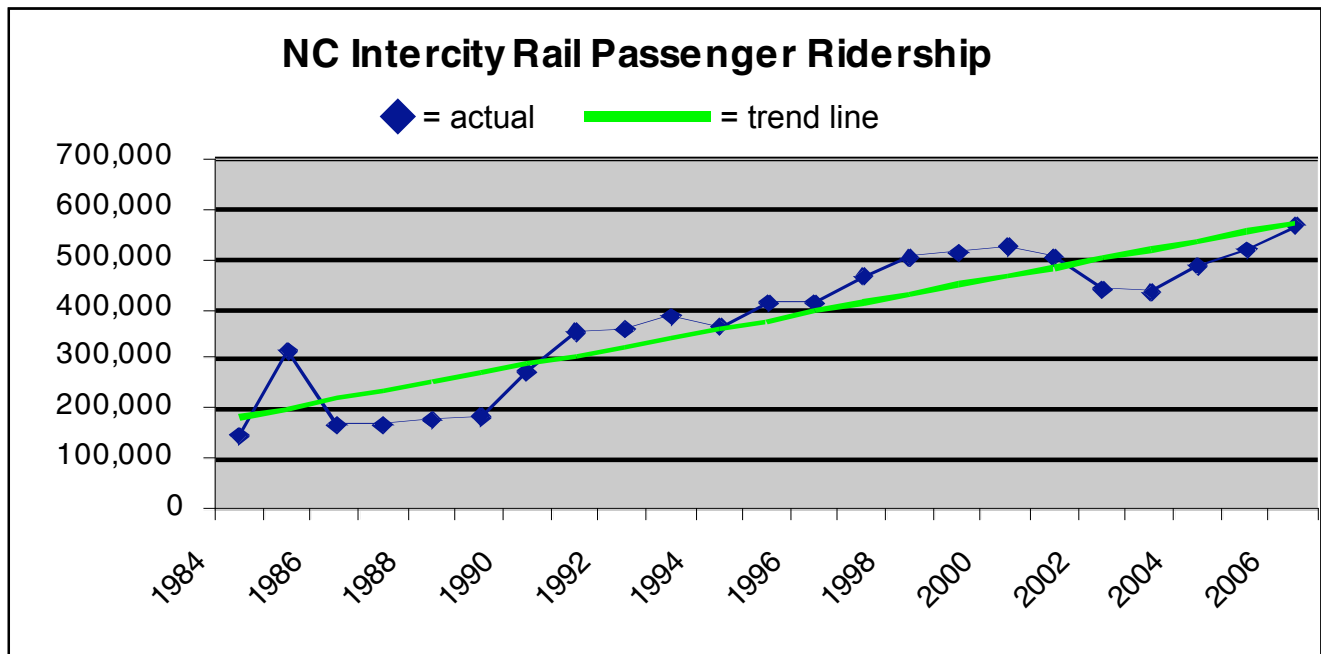
## Measure 2.5 – Percent Increase in the Number of Intercity Rail Passengers

**Background:** The NCDOT Rail Division serves more than 500,000 intercity rail passengers per year. The Piedmont and Carolinian trains are sponsored by NCDOT and paid for through state funding, Amtrak and passenger fares. The two trains provide daily service to Raleigh, Greensboro, Charlotte and nine other North Carolina cities and to the Northeast.

**Objective:** To meet the ridership demands of passengers who desire an affordable, convenient and safe transportation alternative. The current target for ridership is an increase of 3 percent from the previous year.

**Results:** NCDOT achieved a 6 percent increase in the last year exceeding expectations. With current trends in fuel prices and public transportation, ridership and demand on intercity trains is expected to continue to increase.

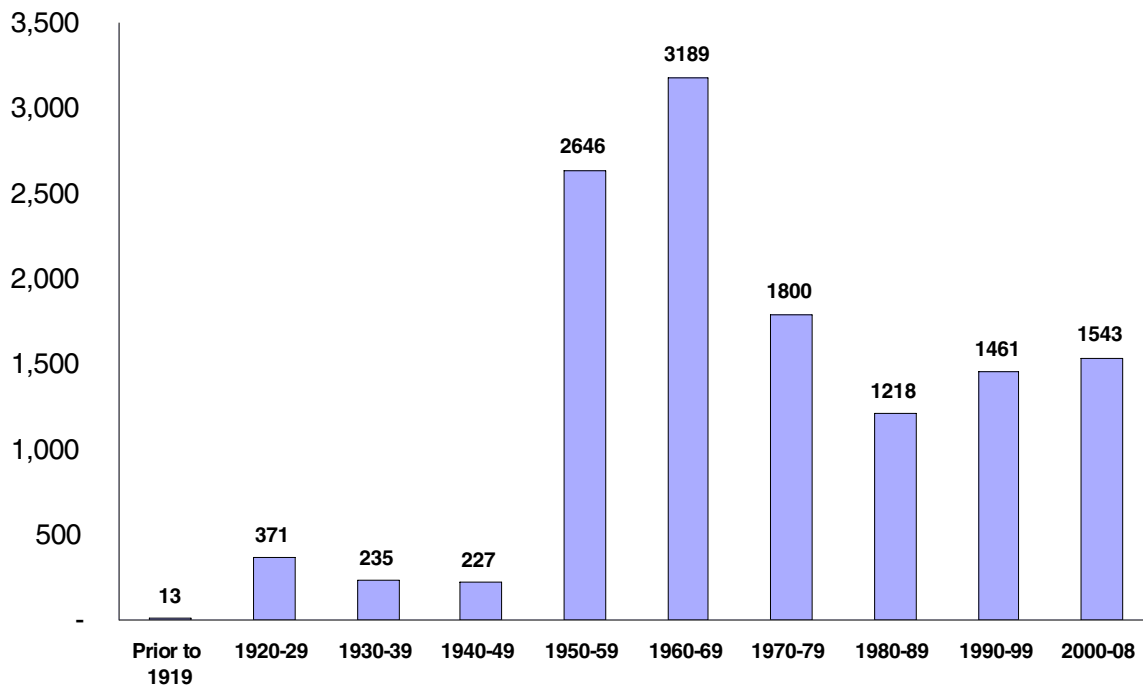
Ridership growth can also be attributed to continued infrastructure improvements on the Raleigh to Charlotte route with the average travel time now at 3 hours and 9 minutes, making it auto competitive.



# Make Our Infrastructure Last Longer

NCDOT has established five organizational performance measures for the goal of making our infrastructure last longer. In addition, there are “indicators” that are financial and non-financial statistical information used to help NCDOT define and gauge progress toward common standards. These are not performance measures because the department has not identified specific goals or targets to achieve. A key indicator for this goal is the number of NCDOT maintained bridges built by decade.

Number of Bridges Built by Decade



More detailed information on the conditions of NCDOT’s infrastructure may be found in the [2008 Maintenance Condition Assessment Report](#).

Key Measures – Infrastructure Last Longer		
3.1	Pavement Condition: Interstate Routes	% of Interstate Route Miles in Good Condition
3.2	Pavement Condition: Primary Routes	% of Primary Route Miles in Good Condition
3.3	Pavement Condition: Secondary Routes	% of Secondary Route Miles in Good Condition
3.4	Bridge Health Index	% of Bridges in Good Condition
3.5	Maintenance – Roadside Features	Weighted score of all Highway Features excluding Pavement and Bridges, in Good/Excellent Condition

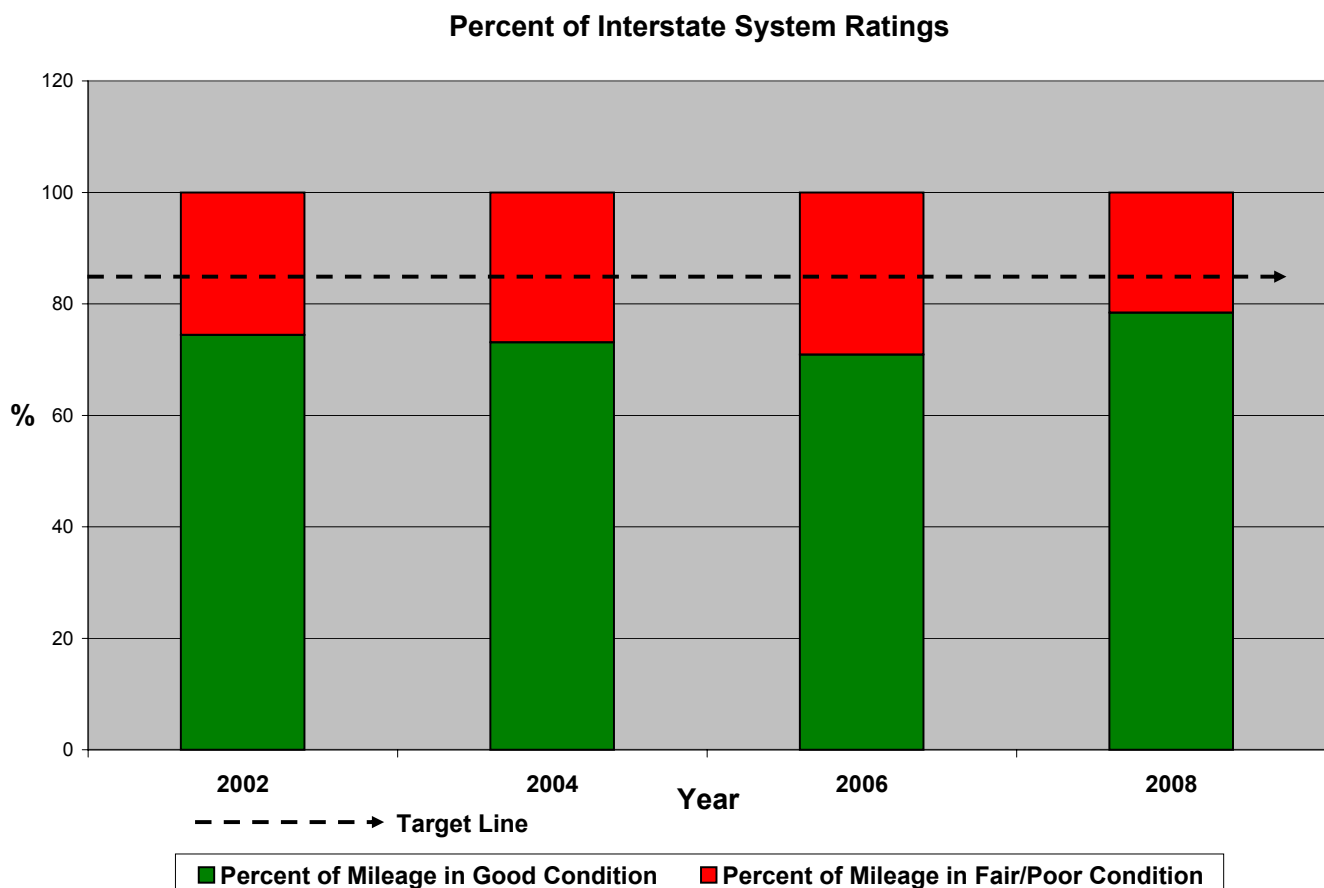
### Measure 3.1 – Percent of Interstate Route Lane Miles in Good Condition

**Background:** This measure is defined as the “percent of interstate lane miles in good condition.” A good condition for pavement is defined as a Pavement Condition Rating (PCR) value of 80 or higher (on a 0 to 100 scale). The PCR rating displayed is a composite score determined using a pavement condition survey performed annually for interstate routes. The survey uses the complete roadway length for all asphalt-surfaced roadways and a sampling of every mile of concrete pavement. The data is sourced from the NCDOT Maintenance Condition Assessment Program (MCAP) Report conducted biannually.

**Objective:** NCDOT has established an overall target of 85 percent of interstate lane miles shall be in good condition. The most recent evaluation was in 2008. The annual target is to continue to improve scores annually.

**Results:** The department is trending upward.

Interstate Routes	2002	2004	2006	2008	Trend
Total Mileage	1,763.8	1,961.6	2,117.7	2,038.3	up
Good Mileage	1,311.7	1,434.8	1,501.0	1,597.6	up
Percent of Mileage	74.4	73.1	70.9	78.4	up



### Measure 3.2 – Percent of Primary Route Lane Miles in Good Condition

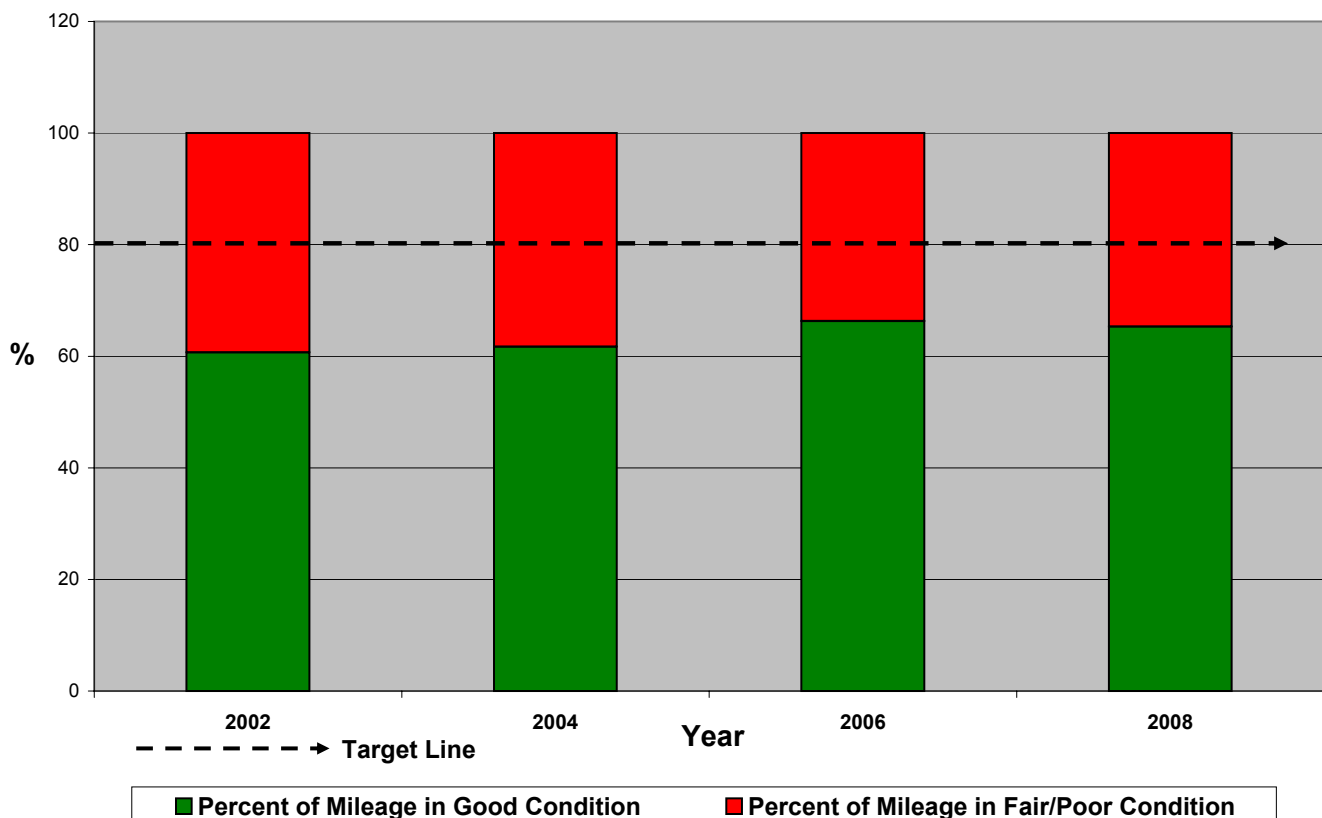
**Background:** This measure is defined as the “percent of primary route lane miles in good condition.” A good condition for pavement is defined as PCR value of 80 or higher (on a 0 to 100 scale). The PCR score displayed is a composite score determined using a pavement condition survey performed every two years for primary and secondary routes. The survey uses the complete roadway length for all asphalt-surfaced roadways and a sampling of every mile of concrete pavement. The data is sourced from the NCDOT Maintenance Condition Assessment Program (MCAP) Report conducted biannually.

**Objective:** NCDOT has established an overall target of 80 percent of primary lane miles shall be in good condition. The most recent evaluation was in 2008. The annual target is to continue to improve scores biannually.

**Results:** The department is trending slightly downward.

Primary Routes	2002	2004	2006	2008	Trend
Total Mileage	15,051.3	15,302.2	15,488.7	15,560.9	up
Good Mileage	9,132.7	9,439.6	10,265.9	10,165.0	down
Percent of Mileage	60.7	61.7	66.3	65.3	down

Percent of Primary System Ratings





### Measure 3.3 – Percent of Secondary Route Lane Miles in Good Condition

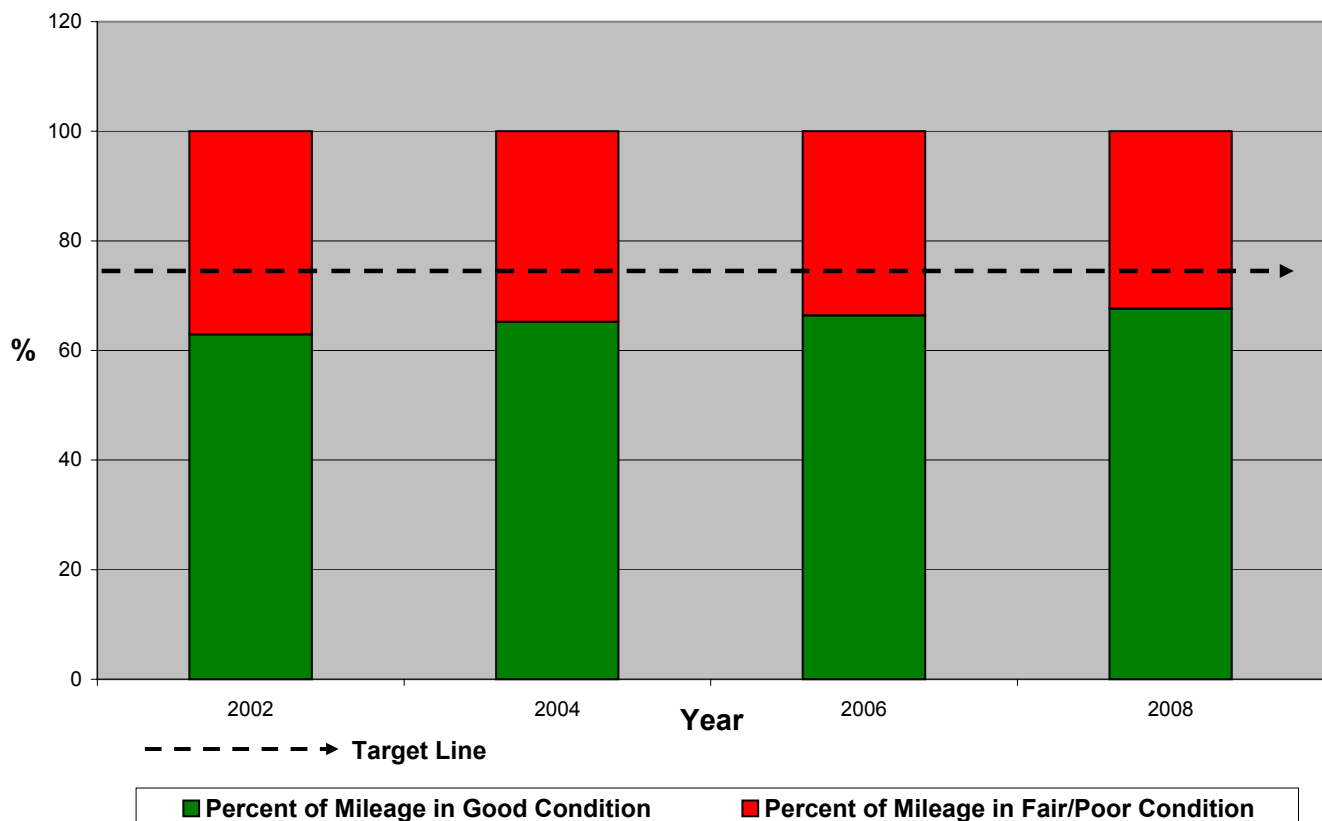
**Background:** This measure is defined as the “percent of secondary route lane miles in good condition.” A good condition for pavement is defined as a PCR value of 80 or higher (on a 0 to 100 scale). The PCR score displayed is a composite score determined using a pavement condition survey performed every two years for primary and secondary routes. The survey uses the complete roadway length for all asphalt surfaced roadways and a sampling of every mile of concrete pavement. The data is sourced from the Maintenance Condition Assessment Program Report conducted biannually.

**Objective:** NCDOT has established an overall target that 75 percent of secondary lane miles shall be in good condition. The most recent evaluation was in 2008. The annual target is to continue to improve scores biannually.

**Results:** The department is trending upward.

Secondary Routes	2002	2004	2006	2008	Trend
Total Mileage	55,695.3	57,029.5	58,127.3	58,848.3	up
Good Mileage	35,051.1	37,161.3	38,608.5	39,807.8	up
Percent of Mileage	62.9	65.2	66.4	67.6	up

Percent of Secondary System Ratings



### Measure 3.4 – Percent of Bridges in Good Condition

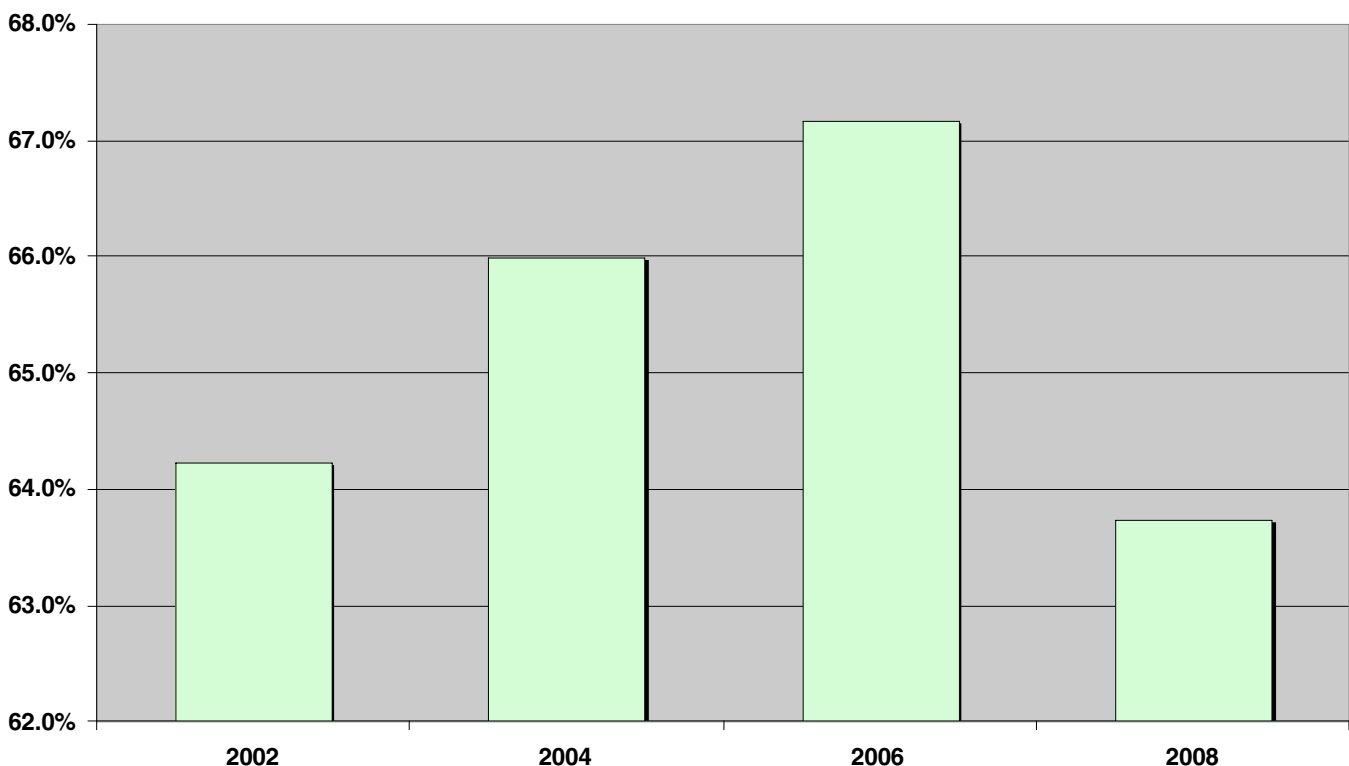
**Background:** Bridge health index is defined as the percent of bridges in good or excellent condition. A bridge is considered to be in good condition if the Level of Service (LOS) for Deck, Sub-Structure and Super Structure are all greater than or equal to 6 (on a 1 to 9 point scale). Bridge health indices are determined using a bridge condition survey in which each bridge in the state is surveyed every two years. The bridge health index is not a reflection of the safety of bridges and highway structures.

**Objective:** NCDOT has established an overall target that 76 percent of bridges shall be rated in good condition.

**Results:** The general trend over the previous condition scores have been static with a range between 63 percent and 67 percent of bridges rated in good condition. The total number of bridges added to the system has also increased. These ratings do not reflect the safety of North Carolina bridges.

Bridges	2002	2004	2006	2008	Trend
Total Bridges	12,402	12,525	12,615	12,739	up
Good/Excellent Bridges	7,967	8,267	8,475	8,120	down
Percent	64.2%	66.0%	67.2%	63.7%	down

Percent of North Carolina Bridges Rated in "Good" Condition



### Measure 3.5 – A Weighted Score of all Highway Features and Elements, excluding Pavement and Bridges, rated in Good Condition

**Background:** The Highway Feature Condition is defined as a weighted value score that represents the physical condition of all highway features and elements, excluding pavement and bridge metrics described earlier, which are in good or excellent condition. The highway feature LOS for roads is determined, for the most part, by evaluating samples of 0.2 mile segments of road for various elements such as:

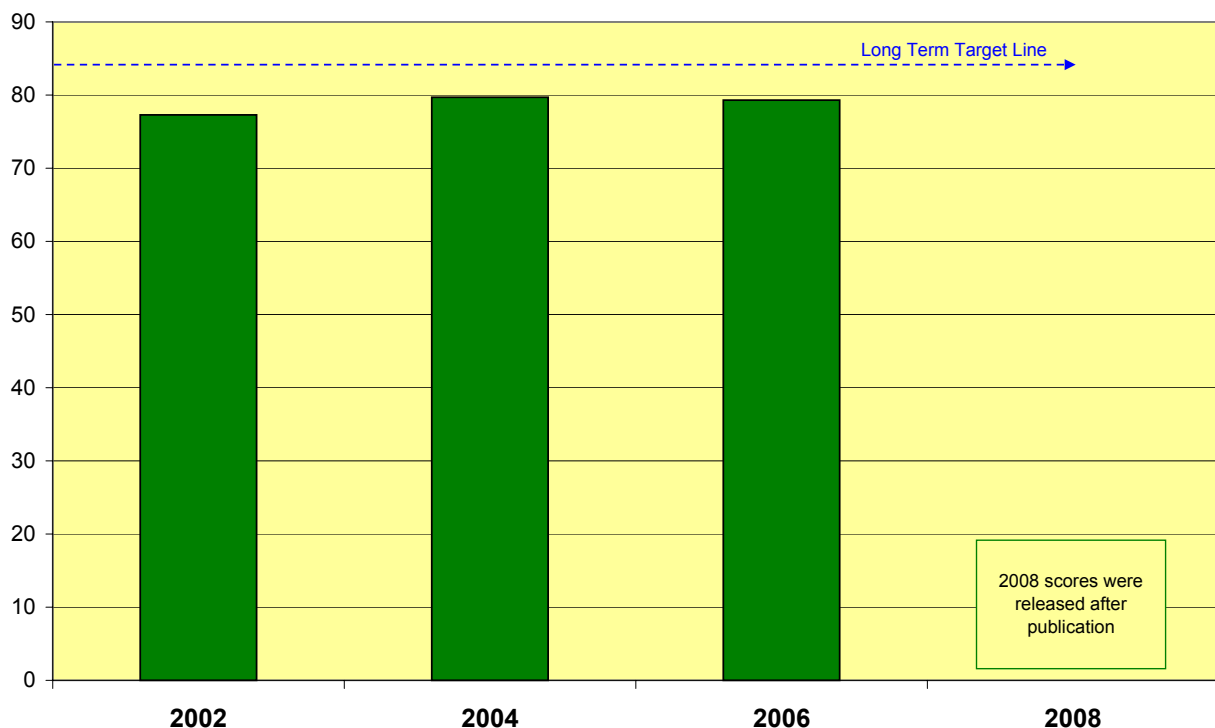
- Shoulders and Ditches – low shoulder, high shoulder, lateral ditches
- Drainage – blocked or damaged pipes and gutters
- Roadside – mowing, brush and tree control, litter and debris, slope and guardrail
- Traffic Control Devices – traffic signs, pavement markings and markers
- Environmental – turf condition and miscellaneous vegetation management

**Objective:** The LOS value reflects a composite score of the surveyed elements (as described above) that were in an acceptable range for the LOS (on a 0 to 100 scale).

**Results:** In 2006, the survey results provided a LOS value on a statewide basis for the interstate system, and by county for the primary and secondary systems. This result is the combined average score of all systems. The target score is 84. The 2008 scores are currently being calculated.

Roadside Features	2002	2004	2006	2008
Overall Good Condition	77.3	79.7	79.3	TBD

Maintenance Condition of Roadside Features



# Make Our Organization A Place That Works Well

NCDOT has established 10 performance measures for the goal of making our organization a place that works well. In addition, there are “indicators” that are financial and non-financial statistical information used to help the agency define and gauge progress toward common standards. These are not performance measures because the department has not yet identified specific goals or targets to achieve.

<b>Key Measures – Organization that Works Well</b>		
4.1	Letting Success Rate	% of Projects “Advertised for Bid” and Awarded to the Contractor for Construction on Schedule
4.2	Right Of Way Delivery	% of Projects that Completed Right of Way on Schedule
4.3	Construction Project Delivery – On Schedule	% of active highway construction projects that are on schedule
4.4	Construction Project Delivery – On Budget	% of active highway construction projects that are on budget
4.5	Environment Stewardship	Average environmental inspection score for all construction and maintenance projects statewide
4.6	Administrative Costs	% Of administrative costs compared to overall budget
4.7	Federal Billing Efficiency	% Of Federal Receipts to Eligible Authority to Bill
4.8	Cash Management	% Of planned expenses to actual receipts
4.9	<i>DMV Service Delivery</i>	<i>% of Offsite (internet, mail, etc.) Services Compared to Onsite Services (future reportable measure)</i>
4.10	<i>DMV Service Delivery</i>	<i>Average Time a Customer has to Wait Before Receiving Services at a DMV Office (future reportable measure)</i>

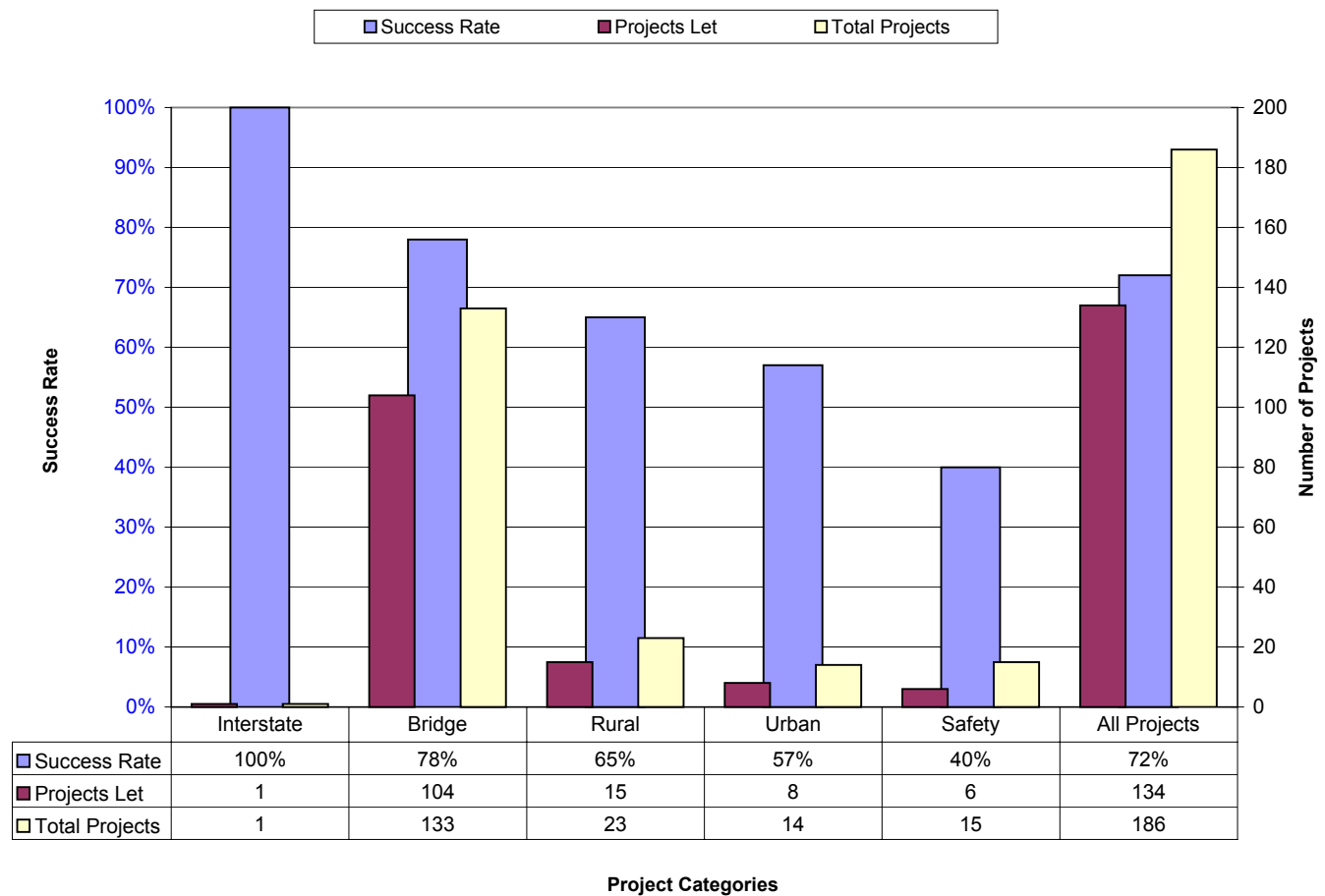
## Measure 4.1 – Percent of Projects that Completed Right of Way Acquisition on Schedule

**Background:** The right of way success rate is defined as the percentage of projects that completed right of way acquisition on schedule in fiscal year 2007-2008. The right of way success rate is computed by comparing the number of projects that were planned for right of way acquisition at the beginning of the fiscal year to the actual number of projects that were let to contract in the same fiscal year. This data is compiled manually by the Schedule Management Unit on a quarterly basis.

**Objective:** The department's target is complete right of way acquisition on schedule for 70 percent of its projects.

**Results:** For fiscal year 2008 the department exceeded its target by completing right of way acquisition on schedule for 72 percent of its projects. The chart below depicts the types of projects that were successful in completing right of way acquisition on schedule.

**Right-Of-Way Success Rate (July 2007 - June 2008)**



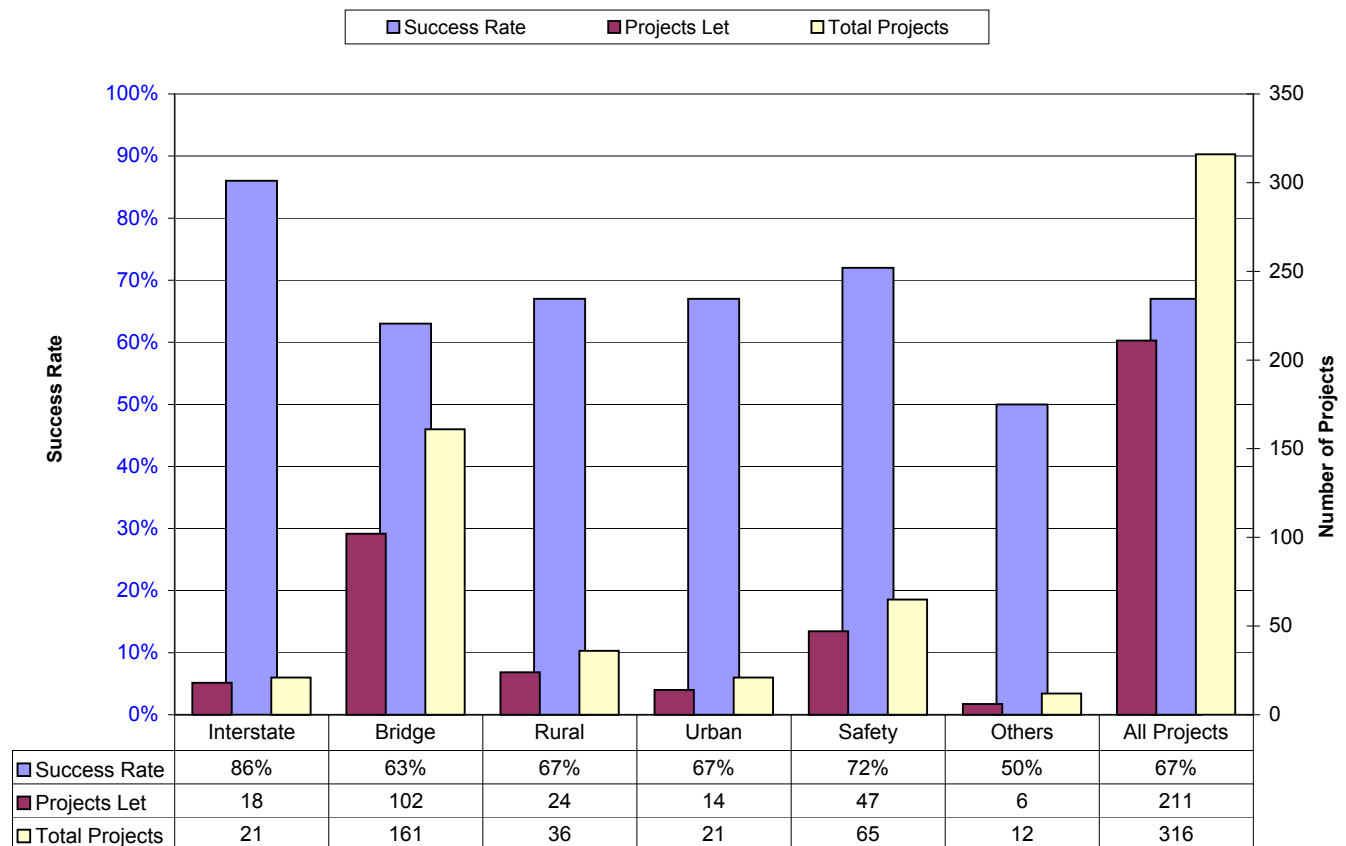
## Measure 4.2 – Percent of Projects “Advertised for Bid” and Awarded to the Contractor for Construction on Schedule

**Background:** The letting success rate is defined as the percentage of projects that were “advertised for bid” and awarded to a contractor for construction on schedule in fiscal year 2008. The process step of “advertising for bid” is also referred to as “letting.” The letting success rate is computed by comparing the number of projects that were planned for let at the beginning of a year to the actual number of projects that were let in that year. This data is compiled manually by the Schedule Management Unit on a yearly basis.

**Objective:** The department’s target is to let to contract 70 percent of its projects on schedule.

**Results:** For fiscal year 2008 the Department fell just short of its target with 67 percent of projects let to contract on schedule. The chart below depicts the types of projects let and their success rates of meeting the letting schedule.

**Letting Success Rate (July 2007 - June 2008)**



**Project Categories**

Safety - Spot Safety and Hazard Elimination Projects  
Others - Rest Area and Ferry Projects



### Measure 4.3 – Percent of active highway construction projects on schedule

**Background:** This performance measure shows the percent of active highway construction projects that are on schedule. The data is sourced from NCDOT's Highway Construction and Materials System (HiCAMS). HiCAMS is a custom database that tracks and supports highway construction work and the testing of materials used in the construction process. HiCAMS produces a real time Construction Progress Report that contains information about highway construction contracts that are awarded by the Board of Transportation. Although the file is updated nightly, portions of the information regarding specific contracts are updated only when progress payments are made to the contractor. When a construction contract is completed, information regarding the contract is no longer available through the Construction Progress Report.

**Objective:** "On schedule" has been defined as actual progress within 15 percent of the scheduled progress. A 70 percent target for on schedule performance has been established.

**Results:** 88 percent of NCDOT's active highway construction project are on schedule (as of Oct. 1, 2008). Information on the status of specific active construction projects can be found at <https://apps.dot.state.nc.us/traffictravel/progloc/>.

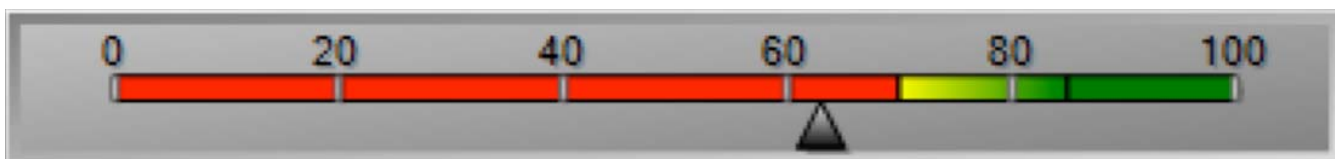


### Measure 4.4 – Percent of active highway construction projects that are on budget

**Background:** This metric shows the percent of all active highway construction projects that are on or within budget. A project is on budget if over/under run percent is less than 4 percent. The data is sourced from NCDOT's HiCAMS, a custom database that tracks and supports highway construction work and the testing of materials used in the construction process. HiCAMS produces real time Construction Progress Report that contains information about highway construction contracts that are awarded by the Board of Transportation.

**Objective:** A project is on budget if the over/under run percentage is less than 4 percent. NCDOT has a target of 70 percent of its active construction projects on budget.

**Results:** NCDOT is currently not meeting its target of 70 percent. As of Oct. 1, 2008, 63 percent of active construction projects are on budget. Information on the status of specific active construction projects can be found at <https://apps.dot.state.nc.us/traffictravel/progloc/>.



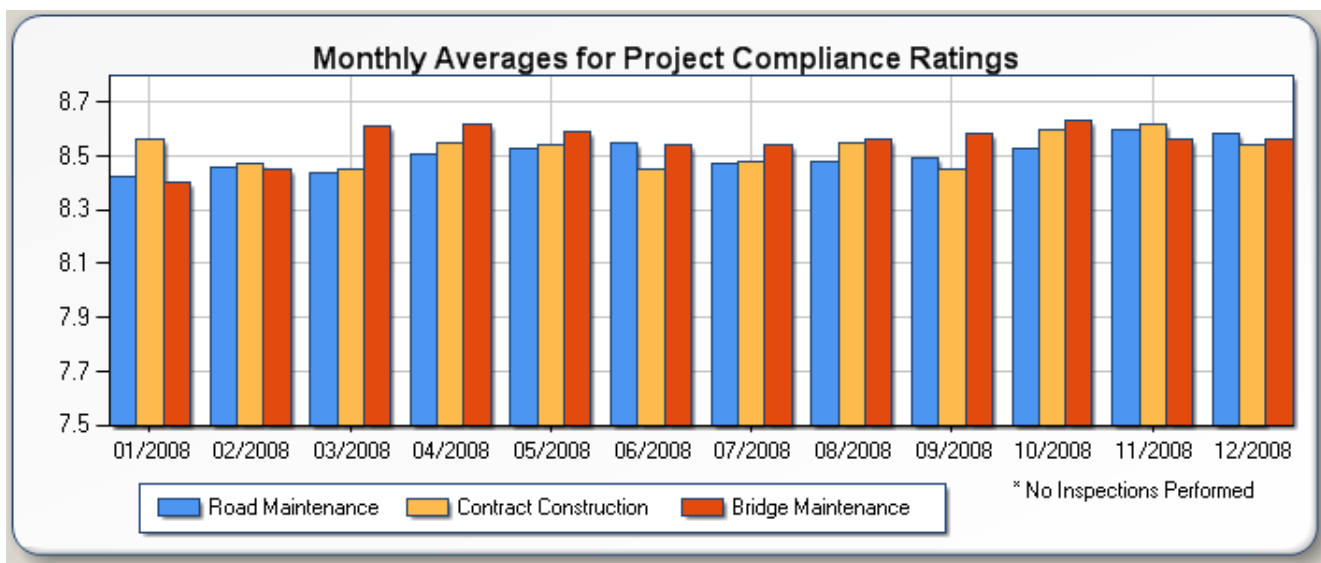
#### Measure 4.5 – Average environmental inspection score for all construction and maintenance projects statewide

**Background:** This is the calendar year to date average score for construction and maintenance projects statewide as inspected and evaluated by the NCDOT Sedimentation and Erosion Control Program. This represents a statewide inspection composite score for Field Maintenance, Contract, TIP and Bridge Maintenance projects. An overall grade is given to each project with the grading scale as follows: 10=Excellent, 9=Very Good, 8=Good, 7=Fair, 6 or below=unacceptable. Every active project in the state is inspected periodically. The data is sourced from the Sedimentation and Erosion Control Inspection Database.

**Objective:** NCDOT has established a target range of 7.5 to 8.8. A score below 7.0 is grounds for the issuance of an Immediate Corrective Action, which is an internal notice to the engineer that there is the potential for environmental concerns.

**Results:** The bar chart for “Monthly Averages for Project Inspection Scores” displays each month’s average score for the three major project categories. NCDOT’s overall average 2008 calendar year score was 8.5.

Additional info, including scores for construction and maintenance projects statewide and charts for all 100 North Carolina counties can be found at: <http://www.ncdot.org/programs/dashboard/>.



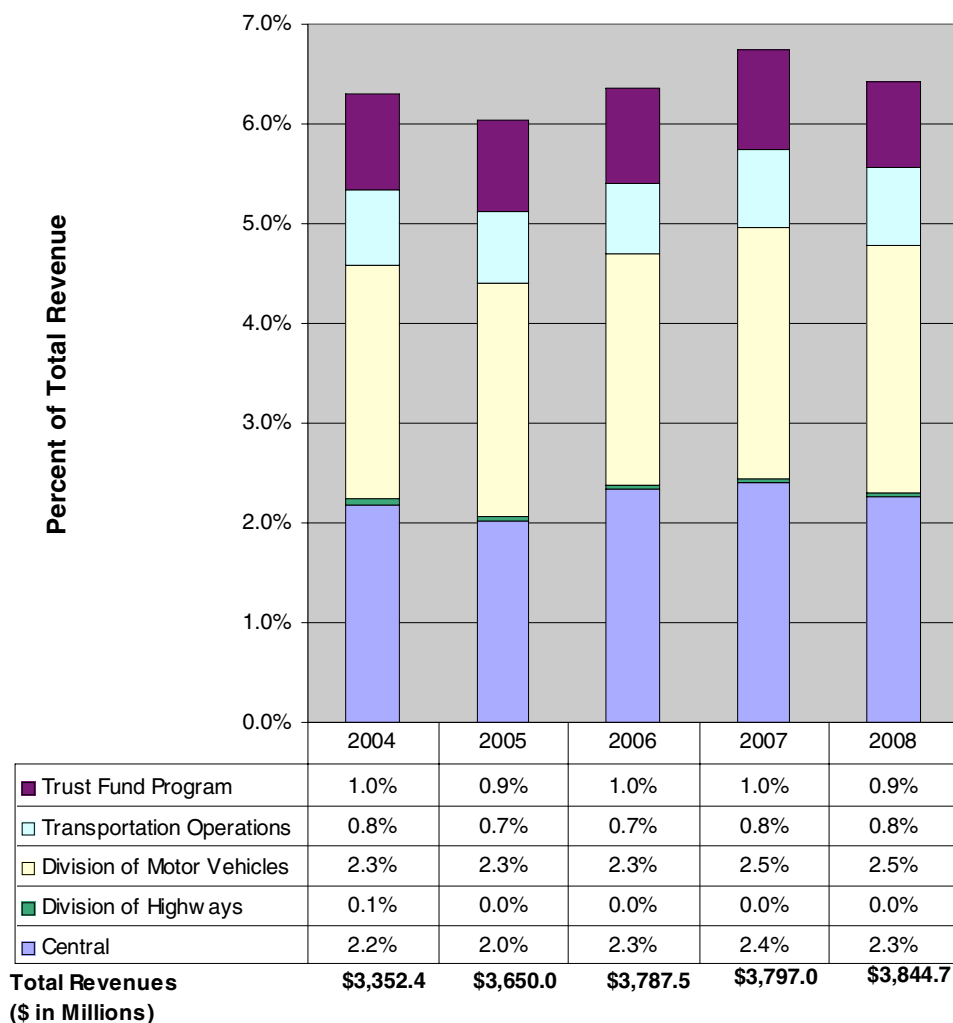
## Measure 4.6 – Percent of Administrative Costs Compared to Overall Budget

**BACKGROUND:** Administrative costs support the operation of the agency. Supporting business functions of legal, audit, communications, accounting, strategic management, and human resources are included in the below calculations—much like how private business calculates overhead rates.

**OBJECTIVE:** Devote resources to infrastructure; keep administrative cost as low as possible. The department's objective is to keep administrative costs below budget (7.6 percent) with no more than 3.6 percent dedicated to revenue collection and DMV enforcement and no more than 4 percent dedicated to central and operational administration.

**RESULTS:** NCDOT met our goal by reducing total administrative costs by more than \$45 million to \$247.15 million or 6.5 percent of total revenue collections of \$ 3.8 billion for the state fiscal year 2008. Costs related to DMV revenue collection and enforcement activities were \$ 95.43 million (2.5 percent of revenue) with the balance of \$151 million (4 percent of revenue) attributable to central operations support.

**Administrative Costs as a Percent of Total Revenue**  
**By State Fiscal Year**  
**Overall Goal < 7.6%, DMV < 3.6%, Transportation <4%**



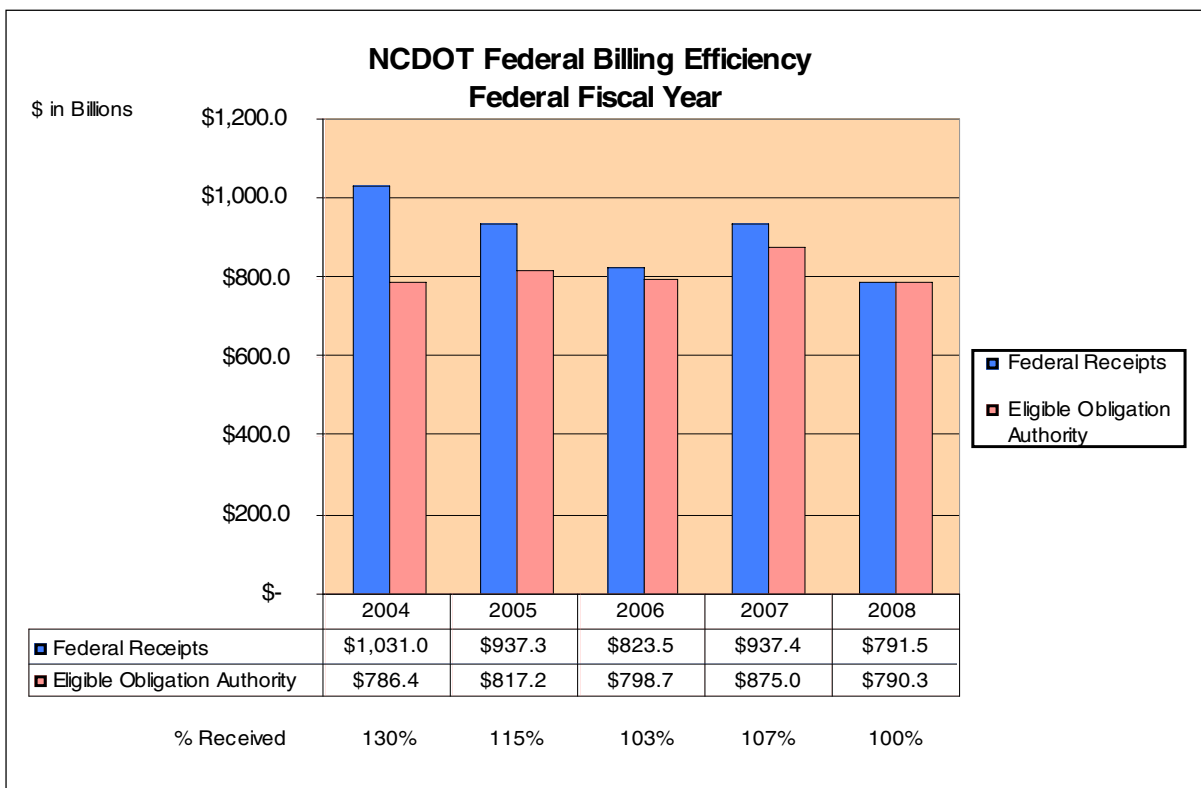
## Measure 4.7 – Percent of Federal Receipts to Eligible Authority to Bill

**Background:** Congress and the Federal Highway Administration (FHWA) allocate “obligation authority” each federal fiscal year allowing for states to commit federal funding on approved projects. Obligation authority is a form of budget control, which limits the total obligation or funding commitments for a given year. As federal funds are authorized to projects and approved by FHWA, the obligation limitation is consumed.

The federal program is a cost reimbursable program, meaning expenses are first incurred by NCDOT prior to seeking reimbursement from FHWA. The department utilizes reports and monitors advance construction project expenditures to convert and efficiently use obligation authority in order to maximize FHWA reimbursement.

**Objective:** To achieve a greater than 95 percent on Federal receipts compared to eligible obligation authority, while using 100 percent of obligation authority. Due to the uncertainty of what Congress will award in obligation authority and other contributing factors, the amount of annual obligation received is subject to vary each federal year; therefore impacting project commitments and federal reimbursement.

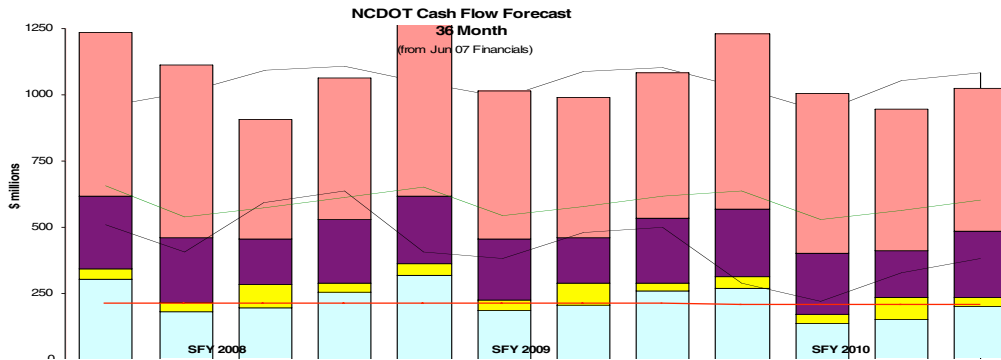
**Results:** The percentage of federal receipts compared to eligible obligation authority achieved for federal fiscal years 2004 through 2008 is 100 percent or greater, with the average being 111 percent.



## Measure 4.8 – Percent of Planned Expenses to Actual Receipts

**Background:** NCDOT is the only state agency that has legislative authority to operate on a “cash flow” basis. The department may let contracts against revenue it expects to receive in the future. Advantages of a cash flow method are: 1) acceleration of multi-year project awards; 2) user fees are strategically expended for immediate needs 3) cash is not “idle” as you match multi-year project expenditures are matched to multi-year revenue collections.

**Objective:** The department’s objective is to forecast receipts and expenditures within a plus or minus percent target to effectively manage cash.



**Results:** As of June 30, 2008, actual revenues collected equaled \$4.083 billion versus planned collections of \$3.966 billion which was 2.9 percent or \$116.5 million less than forecast. For the same period, actual expenditures equaled \$3.955 billion versus \$4.236 billion or 6.6 percent less than forecast. Average forecast variance was 4.75 percent and within an acceptable tolerance for receipts and expenses. The primary exceptions resulted from Highway Use tax collections being less than expected and the timing of certain contract outlays for projects.

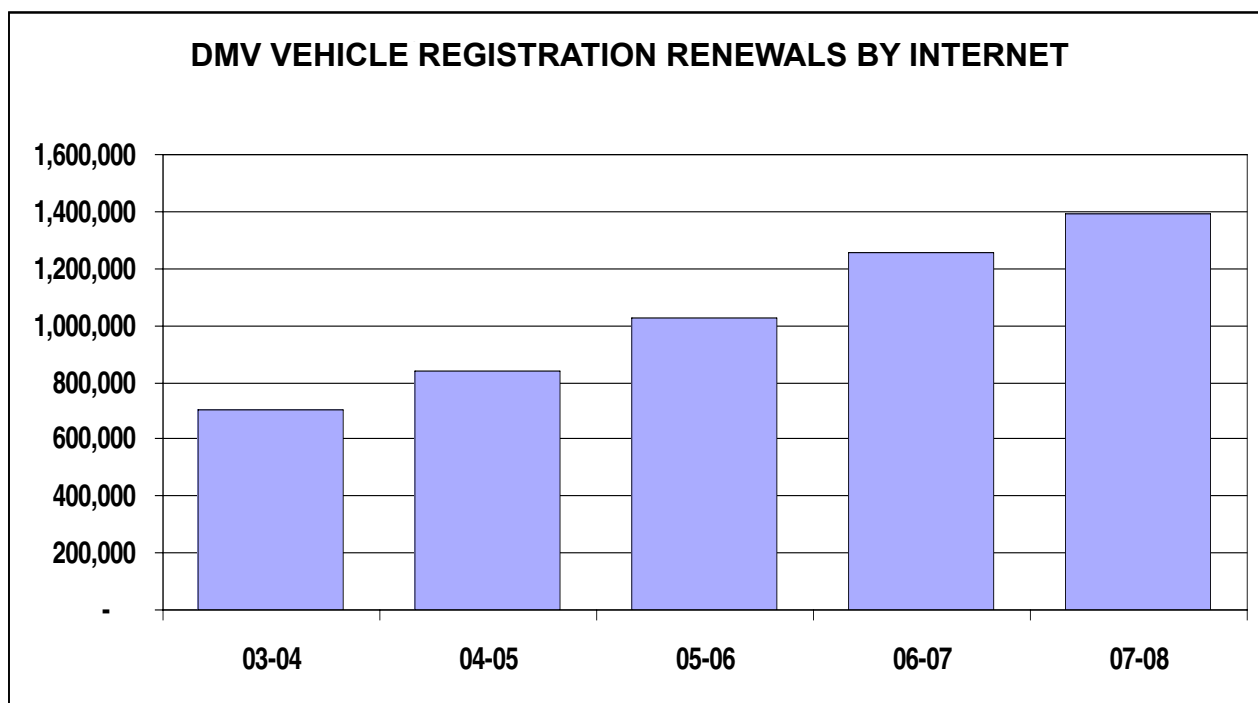
Forecast to Actual History			
Receipts			
SFY	2006	2007	2008
Planned	\$3,953.0	\$3,775.8	\$4,083.0
Actual	3,788.8	3,795.0	3,966.5
Variance \$	\$ 164.2	\$ (19.2)	\$ 116.5
Variance %	4.2%	-0.5%	2.9%
Expenses			
SFY	2006	2007	2008
Planned	\$4,082.0	\$3,838.8	\$4,236.0
Actual	3,791.0	3,608.3	3,954.5
Variance \$	\$ 291.0	\$ 230.5	\$ 281.5
Variance %	7.1%	6.0%	6.6%

## Measure 4.9 – Percent of Offsite Services Compared to Onsite Services

**Background:** The department's goal to improve customer service and efficiency by allowing citizens to receive services away from a DMV office when feasible and applicable. DMV encourages the use of the internet, mail and the call center when appropriate.

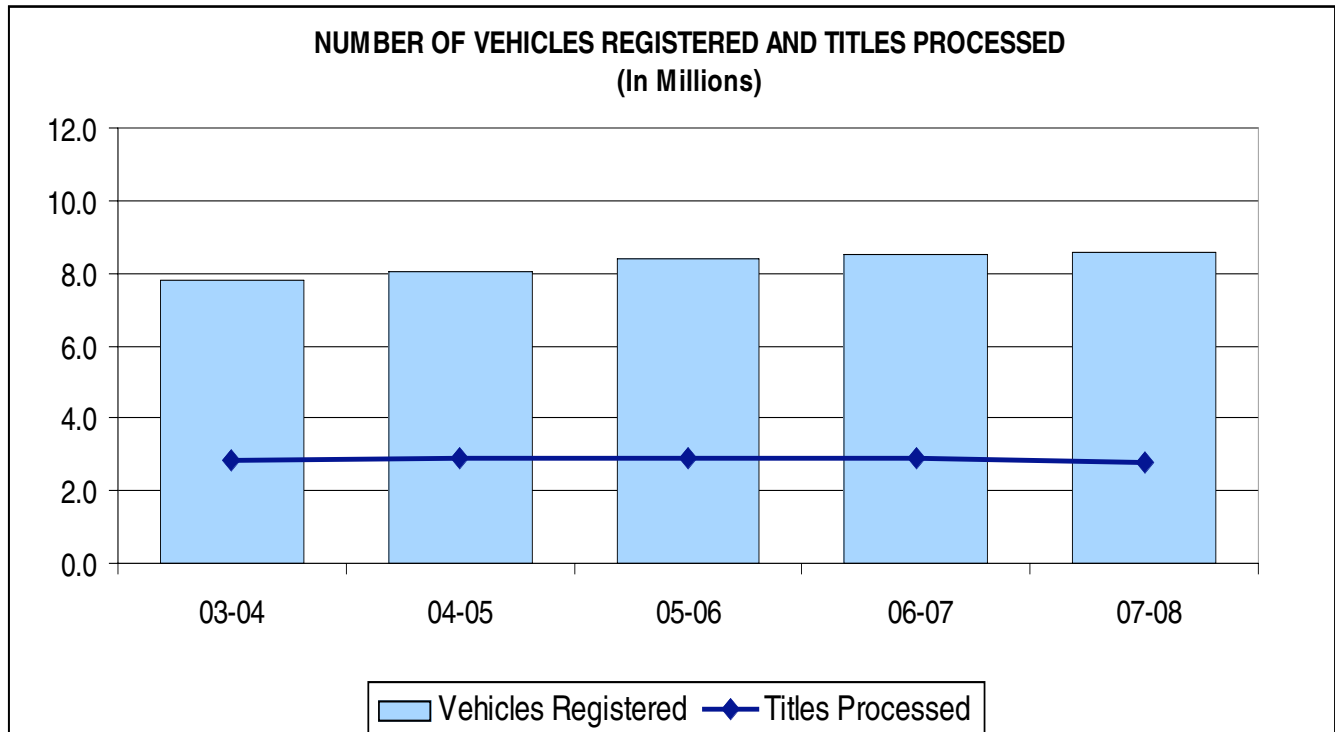
### Key Facts

- Mail-in renewals decreased 119,130, a 9.2 percent decrease from last year's business. The decrease was caused primarily by the remittance processor being inoperable for 62 days during the fiscal year. In order to maintain performance and customer service, work was distributed to other units for processing, and were therefore not reported as mail-in renewals.
- Internet renewals rose by 136,869, a 10.9 percent increase from last year's business. This also contributed to the decrease in mail in renewals.
- The number of customers served through the DMV Call Center increased by 1.9 percent in fiscal year 2008. The "Contact Us" e-mail program usage increased by 3.8 percent and abandoned calls increased by 4.6 percent. Increases in customer calls and "Contact Us" e-mails are due to increase in population, changes in statute and changes in policy.



#### Measure 4.10 – Average Time a Customer has to wait before Receiving Services at a DMV Office

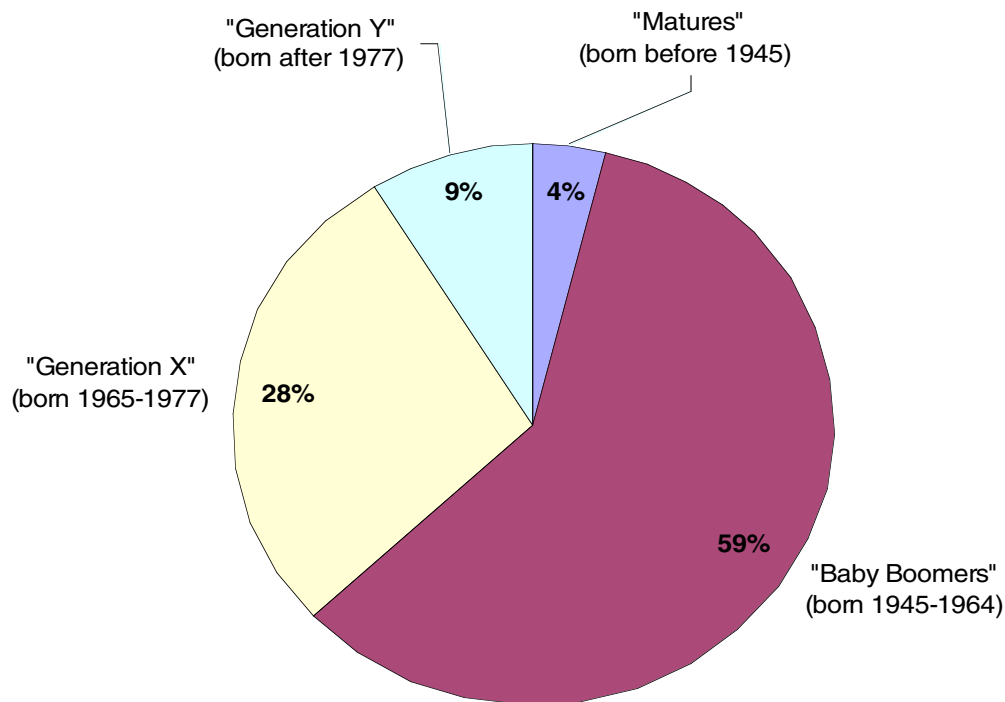
**Background:** The Division of Motor Vehicles is implementing and testing customer traffic management systems in offices with four or more examiners allowing the Division to monitor customer wait time. For the month of July 2008, in 59 offices, the average customer wait time for the 171,666 customers served was 25 minutes. Of these customers, 47 percent waited less than 15 minutes, which is the division's target for customer service.



# Make Our Organization A Great Place To Work

NCDOT has established four performance measures for the goal of making our organization a great place to work. In addition, there are “indicators” that are financial and non-financial statistical information used to help the agency define and gauge progress toward common standards. These are not performance measures because the department has not yet identified specific goals or targets to achieve. A key indicator for this goal is the age of the department’s workforce.

**Aging Workforce at NCDOT**



Key Measures – Great Place to Work		
5.1	Employee Safety	Employee Safety Index
5.2	Employee Hiring Process	Total Average Time to Hire Staff (Future Reportable)
5.3	Employee Engagement	% of employees that feel the Department is a great place to work (Future Reportable)
5.4	Metrics Based Performance Evaluations	% of NCDOT Leadership Positions Under New Results Based Performance Management System

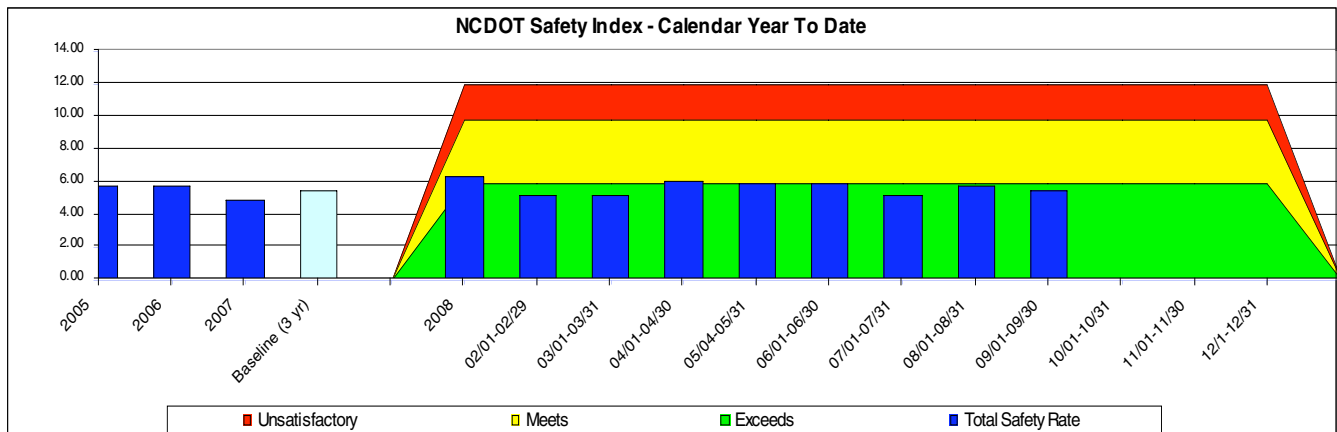


## Measure 5.1 – Employee Safety Index

**Background:** Employee safety is the department's top priority. To better manage this priority an employee safety index has been created by the Safety and Loss Control Unit that includes a weighted score for employee injury rates (40 percent), equipment accident rates (40 percent) and workers compensation claim rates (20 percent). Rates are generated each month by business unit and roll up into an overall score.

**Objective:** The target range to meet expectations is 5.89 to 9.79. Below 5.89 exceeds expectations and above 9.79 does not meet expectations.

**Results:** As of Oct. 1, 2008 the current calendar year to date weighted rate for the department was 6.35.



## **Measure 5.2 – Average Total Time to Hire Staff**

**Background:** The average total time to hire a new staff person is defined as the department average of the number of days to hire a person from initial position posting date to Human Resources approval.

**Objective:** Less than 60 days.

**Results:** The department is currently developing and implementing a system to track this measure and will report on its trends in future reports.

## **Measure 5.3 – Percent of Employees that feel the Department is a Great Place to Work**

**Background:** The Corporate Leadership Council defines employee engagement as “the extent to which employees commit to something or someone in their organization, how hard employees work, and how long they stay as a result of that commitment.”

NCDOT is exploring using an employee engagement survey to gauge employee engagement at NCDOT.

The employee engagement survey is designed to answer three questions:

- How engaged or unengaged are your employees, and are they engaged in the ways that matter most relative to performance and retention?
- How does employee engagement vary throughout your workforce? Are some employees more engaged than others?
- How do your employees compare with employees in other organizations relative to engagement and retention?

Answers to these questions provide critical inputs to the successful management of the human capital resource.

Employee engagement affects business outcomes and engagement can increase employee performance by 20 percentile points and reduce attrition by as much as 87 percent. Since productivity and retention impact the cost of doing business in a dollars and cents way, every organization should concern itself with employee engagement in the workplace.

**Objective:** 60-79 percent of NCDOT employees shall be engaged.

**Results:** The department is currently developing a tool and mechanism to periodically measure the engagement of its employees. Data will be available upon completion.

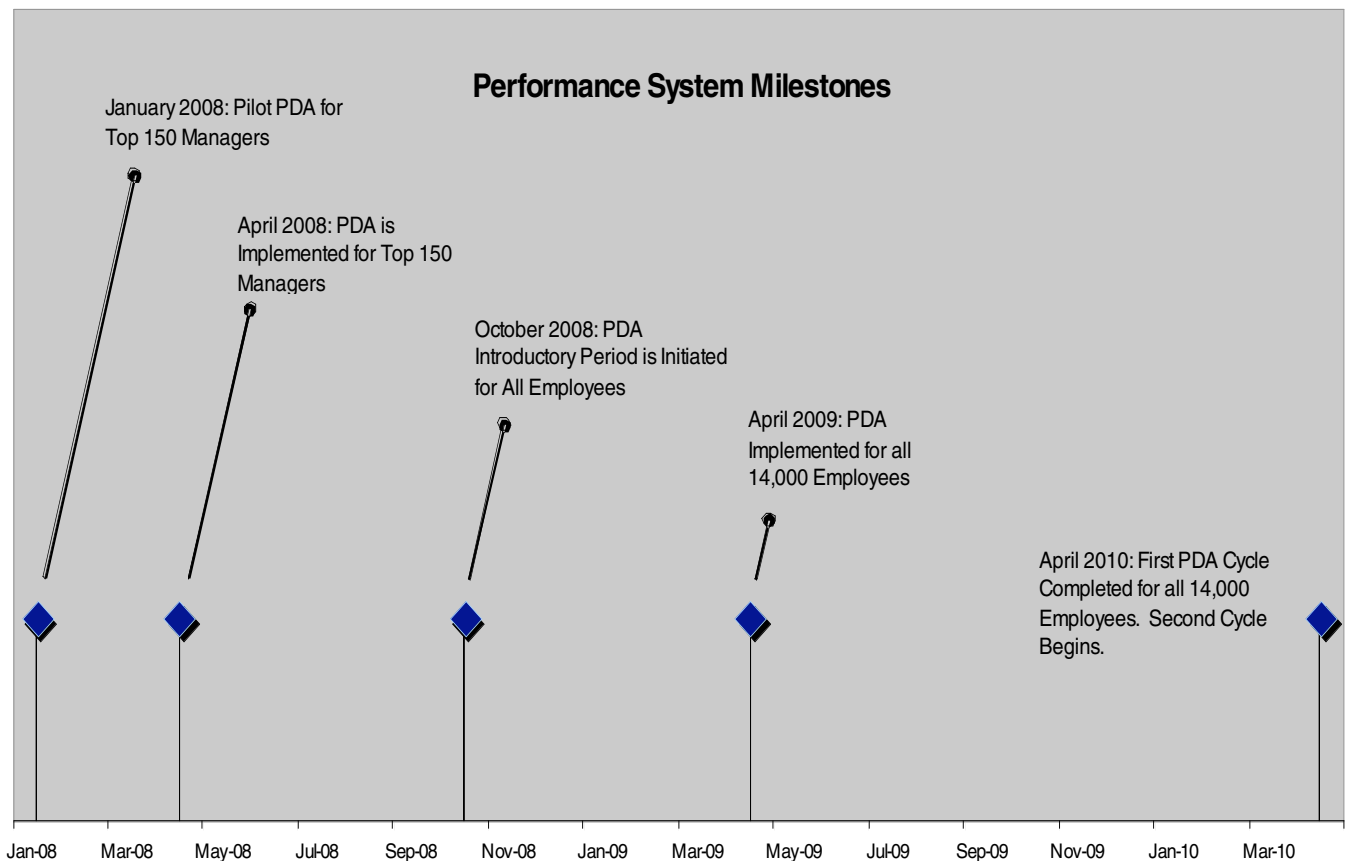
## 5.4 – Percent of NCDOT Leadership Positions under New Results Based Performance Management System

**Background:** Effective April 1, 2008 a new results-based performance management system was implemented for the “top 150” DOT managers. These managers began the current performance cycle using the new Performance Dashboard & Appraisal (PDA), a tool used to document performance expectations (metrics) and the results achieved.

The new performance management system will be implemented for all NCDOT employees on April 1, 2009. Beginning Oct. 1, 2008 all employees began transitioning to the new system for a six-month introductory period. The purpose of this introductory period is to allow time for employees to become familiar with the process and for managers and supervisors to further develop metrics for their employees and to validate the performance measures, targets and weights prior to implementation in April.

**Objective:** On April 1, 2008 all top 150 managers began transition to a new results based performance management system by developing metrics and completing their PDAs. On April 1, 2009, the departments 14,000 employees will begin measuring performance using the PDA system and results-based measures.

**Results:** PDAs were instituted for all top 150 managers (100 percent). Some managers also proactively instituted PDAs for their subordinates in anticipation of the later introductory period.



## **VI. Program Highlights**

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### **A. Make Our Transportation Network Safer**

1. Governor's Highway Safety Programs
2. Sealed Rail Corridor Program
3. Anti-Icing Program
4. Paved Road Improvement Program

### **B. Make Our Transportation Network Move People And Goods More Efficiently**

1. Third Frequency Rail Service
2. Signal Systems & Intelligent Transportation Systems
3. Traveler Information
4. Transit Expansion in Charlotte
5. Statewide Logistics Plan

### **C. Make Our Infrastructure Last Longer**

1. GARVEE Bonds
2. Performance Standards for Highway Operations
3. I-95 Corridors of the Future Program

### **D. Make Our Organization A Place That Works Well**

1. Division of Motor Vehicles
2. Clayton Bypass, Johnston County
3. NC 12 Bridges, Hyde County
4. NCDOT's Transformation
5. Incentive Pay Programs
6. Floodplain Mapping Memorandum of Agreement
7. Green Welcome Center, Wilkes County
8. Litter Programs
9. Recycling & Conservation
10. Congestion Mitigation & Air Quality Program
11. Rail Station Rehabilitation Award
12. Alternative Fuel Usage

### **E. Make Our Organization A Great Place To Work**

1. Talent Management
2. NCDOT Hero's

## **A. Make Our Transportation Network Safer**

### **A1. Governor's Highway Safety Programs**

The N.C. Governor's Highway Safety Program (GHSP) administers the "Click It or Ticket" program. The program began as a national pilot project in 1993 to increase seat belt usage and child passenger safety through stepped-up enforcement of the state's seat belt and child safety seat laws. In 2003, the National Highway Traffic Safety Administration adopted the campaign as a national model that is now used in more than 40 states.



Nearly every law enforcement agency in the state participates in "Click It or Ticket". During the 2008 campaign state and local law enforcement officers issued more than 90,000 traffic and criminal citations.

The state's seat belt usage rate was 65 percent when the program began 15 years ago. In 2008 North Carolina seat belt usage reached 89.8 percent, it's highest rate to date.

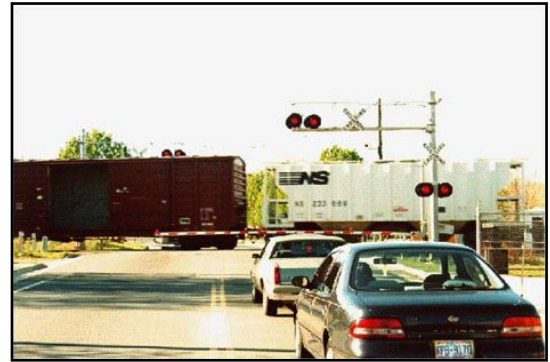
In 2005, GHSP implemented an initiative to compliment "Click It or Ticket" to encourage teen drivers to buckle up. "R U BUCKLED?" requires drivers and passengers at participating high schools to buckle their seat belts before leaving school property or risk losing high school parking privileges. The program started in 53 high schools in 16 counties. As of 2008 the program is in more than 200 schools in 74 counties with 64,000 student drivers participating. In 2005, there were 88 unbuckled teenage fatalities in North Carolina. In 2007, there were 68 unbelted teenage fatalities, hinting at a trend that more young drivers are buckling up.

## A2. Sealed Rail Corridor Program

### On Track for Safety in North Carolina

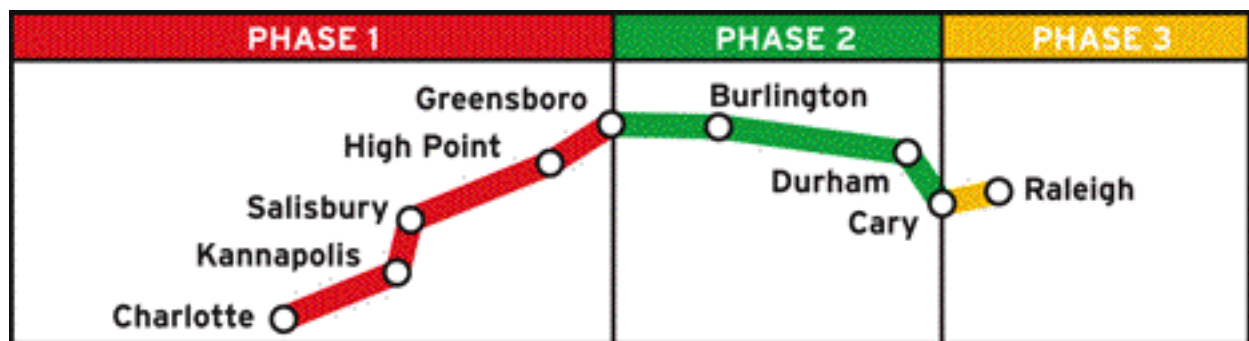
The North Carolina Sealed Corridor Program aims at improving or consolidating every highway-rail grade crossing, public and private, along the section of the designated Southeast High Speed Rail Corridor that runs through North Carolina between Raleigh, Greensboro and Charlotte. The entire corridor includes 172 public and 43 private railroad crossings. Recent statistics continue to show a growth in highway and rail traffic, making the need for crossing improvements increasingly critical for improving safety for both vehicular and rail operations.

The implementation of **the North Carolina Sealed Corridor Program** is a demonstration of nonstandard corridor highway-railroad grade crossing improvements. NCDOT has adopted enhanced devices as an engineering standard for implementation on high-density freight and passenger corridors in the state, as per engineering diagnostics. These include median separators, four-quadrant gates, longer gate arms, special signage, video ticketing system and Intelligent Signal Monitoring Systems.



The Sealed Corridor Program is divided into three construction phases: Phase 1, from Charlotte to Greensboro, Phase 2, from Greensboro to Cary, and Phase 3, from Cary to Raleigh. The entire corridor includes 172 public and 43 private railroad crossings.

## RESULTS



- These crossing safety improvement devices reduced gate violators from 67 percent to 98 percent from 1995 to 1999.
- The projects implemented on the Sealed Corridor through December 2007 resulted in 19.7 potential "lives saved".

### **A3. Anti-Icing Program**

When winter weather is forecasted NCDOT uses an innovative approach to improve traffic safety and mobility on our highway system. The department has discovered that if we can prevent frozen ice and snow from sticking to the pavement when it starts to fall, then it's much easier to keep roads clear and traffic moving. Based on national research and other states successes with anti-icing, NCDOT began using liquid salt brine on our major routes. Traditional deicing techniques break the bond between the pavement and ice or snow. Crews spray a thin coat of salt brine prior to a winter storm event to prevent frozen precipitation from bonding to the pavement surface. Salt brine is manufactured by the department for approximately \$0.05 per gallon using plain water and salt. Unfortunately, salt brine is not effective in every winter event. If the storm begins as rain, it can dilute the salt brine and make it ineffective.

#### **Benefits of Salt Brine**

- NCDOT crews can cover more territory by beginning treatment in advance of the storm before the roads become hazardous with ice and snow
- Salt brine does not bounce or blow off road surface like regular salt so material is more evenly applied and therefore more effective
- Salt brine has a possible residual effect and stays on the road for days
- Keeps traffic moving by preventing slick roads
- Reduces cost by reducing quantity of salt used
- Reduces manpower necessary which means less overtime costs, less operator fatigue and safer working conditions
- Results in easier removal of accumulated snow by conventional means (plows).

Salt brine is beneficial to the environment by reducing the amount of salt used. It has been used for years throughout the snow belt and is a proven anti-icing agent. NCDOT is using this technique to decrease costs, increase efficiency and improve mobility and safety when winter weather strikes.

#### **A4. Paved Road Improvement Program**

Since the General Assembly passed House Bill 1825 in 2006, the Secondary Roads Program has progressively transitioned from a predominantly paving program that has paved over 12,000 miles of unpaved roads across North Carolina, into a paved road improvement program. Flexibility in Highway Fund appropriations has allowed the department to program modernization projects addressing safety and mobility needs. This program revision enabled NCDOT to continue projects similar to the *NC Moving Ahead* program adding a focus on long-term solutions.

In June 2007, the Board of Transportation adopted Project Selection Guidelines for prioritizing projects having the greatest affect on safety and mobility improvements. Roads with higher traffic volume and narrow lane widths are initially considered as higher priority projects. The strategic planning process has increased opportunity to combine safety and mobility projects with resurfacing projects, reducing contract mobilization costs.

NCDOT programmed over 100 projects during 2007 which are now being constructed including road widening, pipe and bridge replacements, pavement strengthening, installation of guardrail, and construction of turn lanes.



## B. Make Our Transportation Network Move People And Goods More Efficiently

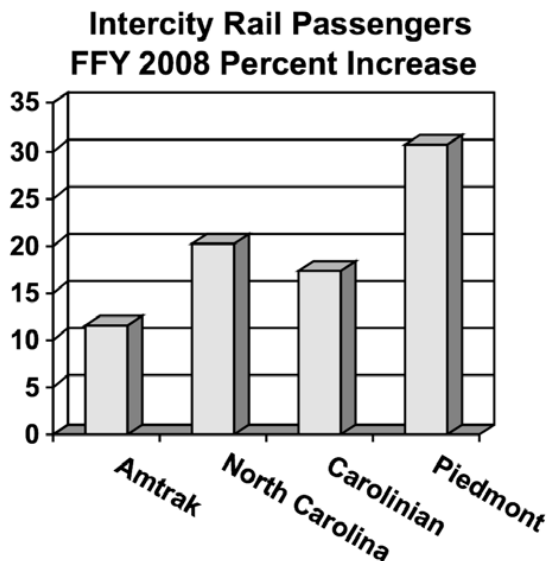
### B1. Third Frequency Rail Service

Six passenger trains serve North Carolina, including two state-sponsored trains — the Piedmont and Carolinian — and four Amtrak national system trains. North Carolina is one of 14 states that provide operating and capital support needed to operate Amtrak service in each state. NCDOT further supports these passenger rail services through marketing, track improvements, equipment refurbishment, and station rehabilitation and construction.



Ridership in the state has increased steadily since service began in 1990, with more than 635,000 passengers using the train to travel to or from North Carolina each year. For the past several years, the Carolinian has been one of Amtrak's top-performing trains in terms of cost recovery. Numbers of passengers on the state-sponsored Piedmont also have risen steadily since service began in 1995 – from nearly 26,000 passengers in its first year of operation to more than 60,000 during federal fiscal year 2008. The Piedmont consistently ranks first or second in customer service among all Amtrak operated trains in the nation.

A third intercity passenger train between Charlotte and Raleigh will be added to the current service to help meet growing demand as well as ridership increases. The new train service will run at midday, with departures from Raleigh and Charlotte. Before the service can be inaugurated, locomotive engineers need to be hired and trained, the state's passenger locomotives re-built to comply with new emissions standard and additional passenger equipment obtained. Since new intercity passenger equipment is difficult and expensive to obtain, NCDOT rehabilitates used passenger equipment for about half of the cost to purchase new.



## **B2. Signal Systems and Intelligent Transportation Systems**

### **Greensboro Computerized Traffic Signal System**

Greensboro depends on its signalized streets to move traffic through the city. NCDOT is upgrading and expanding the existing computerized traffic signal system at more than 453 intersections in and around the city of Greensboro. Forty-one traffic cameras are also being added across the city. With this new system and good maintenance, Greensboro area travelers will see decreased travel times, fewer stops, and lower vehicle emissions. The project began in June 2008 and will take five years to complete.

### **Improving Mobility & Safety on I-95**

Traffic incidents such as accidents, weather events and work zones slow traffic and decrease motorist safety along I-95. NCDOT is using technology to keep traffic moving along I-95 by adding 24 traffic cameras and 12 Dynamic Message Signs. Forty-eight nearby traffic signals are also being coordinated to improve mobility when traffic is detoured off I-95 due to a major accident or a work zone. All of these tools work with NCDOT's existing traveler information Website [ncdot.org/traffictravel](http://ncdot.org/traffictravel) and travel information hotline "511". The project began in September 2008 and will be complete in the summer of 2009.



### **B3. Traveler Information**

NCDOT's Travel Information program provides timely, reliable, and accurate travel information so drivers can make informed travel decisions. NCDOT's Travel Information program includes the NC 511 voice activated/voice recognition phone system, the Traveler Information Management System (TIMS) Webpage, traffic cameras and Dynamic Message Signs. These systems advise the public of major accidents, work zones, weather events and other events that cause disruptions to traffic.



NCDOT is working with public and private partners to obtain additional data to improve the quality of our traveler information. These include

- N.C. State Highway Patrol (NCSHP) notifies NCDOT of accidents that NCSHP is responding to.
- INRIX, a private provider of traffic information, provides congestion and flow data on all of North Carolina's Interstates.
- TrafficLand will take NCDOT's live traffic camera video feeds and provide them back in a streaming video format for the public.
- Traffic.com provides speed information for major highways around the Raleigh area. This innovative Federal Highway Administration program allowed NCDOT to obtain this data at no cost to the state.

NCDOT's travel information system also disseminates information to the public during AMBER/SILVER alerts and high impact weather alerts. When the N.C. Center for Missing Persons activates an AMBER or SILVER alert, NCDOT provides information to the public and our transportation partners via our NC 511 phone system, our Travel Information Webpage and on our Dynamic Message Signs in the appropriate areas. During some recent alerts, NCDOT's 511 phone system call volumes increased from the average of 200 calls per hour to 1,000 calls per hour. The NC 511 system also helps many citizens during major weather events. During Hurricane Hannah in the summer of 2008, the NC 511 system saw a record 54,000 calls in a single day, nearly equivalent to the number of calls received in a normal month.

## B4. Transit Expansion in Charlotte

During the 1990s, Charlotte leaders realized that the city's continued economic growth and preservation of its high quality of life required a fresh look at how transportation and land use development needed to work in this rapidly growing area. An extensive local planning effort created a vision that tied together highway, transit and land use. The plan called for initiating rail or bus rapid transit in the county's five main travel corridors and a major increase in regular bus service throughout the county. Mecklenburg County residents approved a half-cent sales tax for transit to fund the local share of the transit projects. NCDOT provided a 10 percent state match to Charlotte's federal grants for bus purchases and construction of new transit facilities.

### SOUTH CORRIDOR LIGHT RAIL

The first rail transit project in Charlotte, and the whole state, is the South Corridor light rail project, also known as the LYNX Blue Line. It cost \$462 million, including a state share of roughly \$115 million obligated under a State Full Funding Grant Agreement. Service started in November 2007, and includes about 9.5 miles of track from downtown Charlotte along South Boulevard to near Pineville. Initial ridership forecasts were for 9,100 weekday passengers. During its first full month of service, weekday ridership averaged 12,457 customers.



By August 2008, weekday ridership had increased to 16,350 customers. Park-and-ride lots serving commuters are at capacity. Charlotte is planning to buy more rail cars and to expand the park-and-ride lots to meet demand.

### EXPANSION OF BUS SERVICE

Along with the rail and bus rapid transit projects, Charlotte's plan included a major increase in services provided by fixed route buses. In the period from FY 2000 to FY 2007, bus ridership increased an average of 5.5 percent annually – from 13,640,000 to 19,760,000.

Summary of CATS Ridership and Service Levels  
FY2000 - FY2008

		2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change 2008 v. 2000
Total System Ridership	(millions)	13.64	14.18	14.71	15.53	16.36	17.78	19.16	19.76	23.06	69.1%
Service Miles	(millions)	8.90	9.70	11.06	14.03	13.51	14.72	15.18	15.65	16.30	83.1%
Service Hours	(millions)	0.60	0.74	0.79	0.85	0.86	0.92	0.95	0.96	1.02	70.0%

Note: In 2000, CATS started with local and express bus services; ADA paratransit services; and vanpools. From FY2001 to FY2006, neighborhood circulator services and regional express bus services were added along with an expansion of local and express bus services. Historic trolley service was operated in FY2005 and FY2006. Light rail service started in mid-FY2008 and included an expansion of local bus and neighborhood feeder bus service.

Source: Charlotte Area Transit System Annual Management Reports and CATS Operations Planning Staff.

## **B5. Statewide Logistics Plan**

The *Statewide Logistics Plan for North Carolina* was developed in response to House Bill 1005, Session Law 2007-551 that required the North Carolina Office of State Budget and Management to develop a statewide logistics plan addressing the long-term economic, mobility, and infrastructure needs of North Carolina. The plan includes input from state agencies, shippers, carriers and other private sector stakeholders.

The plan provides three recommendations that will improve and modernize the freight logistics environment in North Carolina:

1. Establish a Freight Logistics Organization – this organization would be responsible for articulating the state’s freight policy and coordinating with public and private sector partners.
2. Create a Freight Logistics Authority – the authority would be an independent agency responsible for implementation of freight logistics policies and plans. It would also work directly with freight stakeholders and NCDOT to ensure open lines of communication and mutual partnership.
3. Prepare a Comprehensive Goods Movement Plan – the Freight Logistics Authority should be tasked with the development of a Comprehensive Freight Logistics Plan to include specific projects, priorities, funding recommendations and implementation strategies.

The plan also lays out seven principles that should guide the implementation of the recommendations.

1. Embolden the Knowledge-Based Economy
2. Support Existing Industries
3. Transform NCDOT into an Operations-Based Agency
4. Facilitate Pass-Through Traffic
5. Support Import/Export Activity
6. Partner with Military Investments
7. Support Innovations in Transportation Infrastructure

NCDOT’s transformation efforts have begun to incorporate these principles into our transportation program.



## C. Making Our Infrastructure Last Longer

### C1. GARVEE BONDS

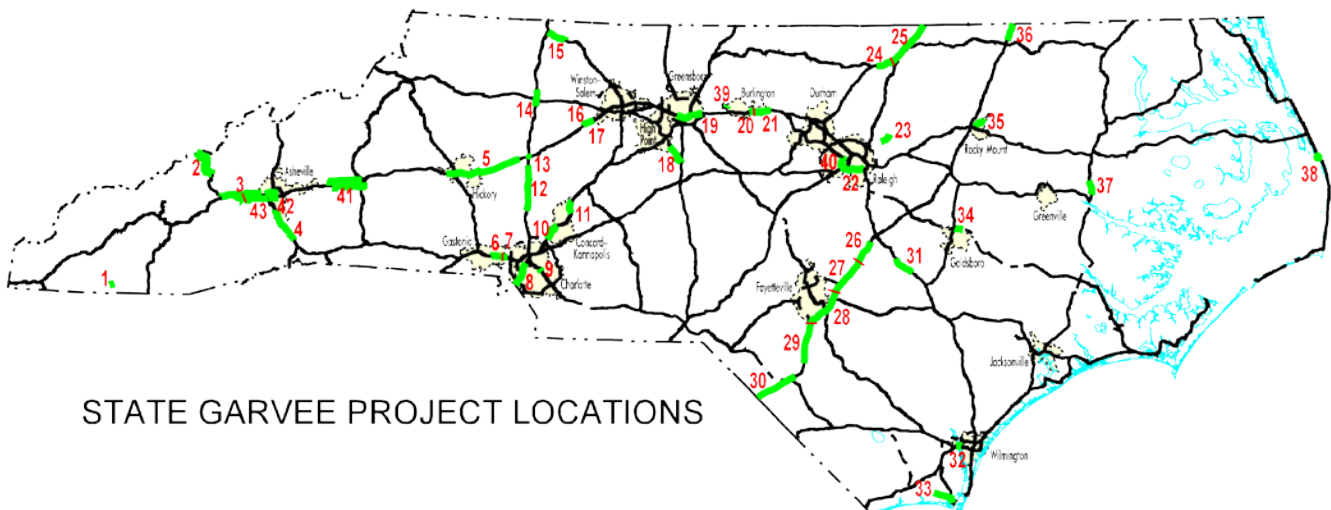
In August 2005 the General Assembly passed legislation authorizing the issuance of GARVEE bonds or other eligible debt-financing instruments to finance federal-aid highway projects using federal funds to repay the debt. Representatives from NCDOT, State Treasurer's Office, Federal Highway Administration, as well as financial advisors and bond counsel representatives, worked to achieve the first sale of GARVEE bonds providing \$287.6 million for much needed improvements on Oct. 17, 2007.

Unlike most states, North Carolina designed its GARVEE program with an "evergreen" structure that allows it to issue additional bonds over time, subject to certain legislative requirements. Highlights of North Carolina's GARVEE legislation include the establishment of conservative annual debt service relative to anticipated federal revenue, geographic distribution of the bond proceeds to finance improvements to the federal highway system, flexibility in project selection with the enhanced ability to add or substitute projects, and most importantly, legislative authority for continuing use of the bonds.

**"GARVEE bonds have allowed us to accelerate vital projects across the state and save millions of dollars in inflationary costs. As North Carolina's transportation needs continue to grow, GARVEE bonds will play an increasingly important role in funding improvements and keeping pace with the many demands on our infrastructure."**

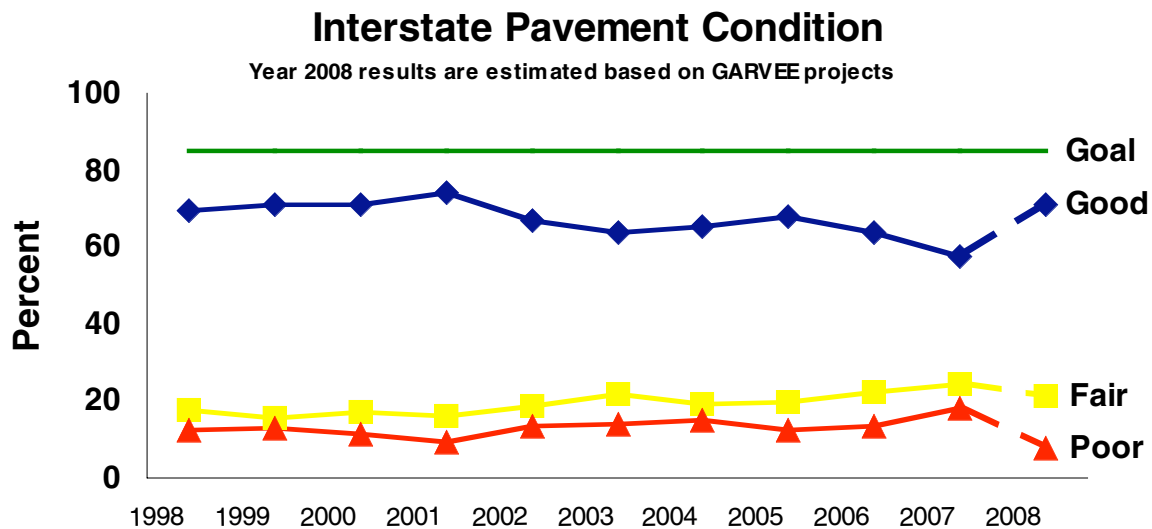
**Transportation Secretary Lyndo Tippet**

The state map below shows the 43 GARVEE projects included in the current State Transportation Improvement Program (STIP). These projects aim to increase safety, preserve and improve interstate routes, and enhance North Carolina's strategic highway corridors. To accomplish the programmed projects, NCDOT plans to also issue bonds in years 2010, 2011 and 2013.



STATE GARVEE PROJECT LOCATIONS

With the first issuance of bonds, NCDOT programmed primarily interstate preservation and rehabilitation projects to reverse the degradation of its interstate system. The graph below demonstrates the positive gains in the condition of the pavement on the interstate system thanks to the GARVEE funding.



Shown below are the before and after pictures of the I-440 Interstate resurfacing project southeast of Raleigh, which was accomplished due to GARVEE funding.



NCDOT estimates that 29 strategic projects were accelerated at an average time savings of 3.4 years with an estimated cost savings after debt service of \$135 million through the initial October 2007 GARVEE bond issuance. The agency also estimates that \$509 million will be saved through the GARVEE projects included in its newly adopted 2009-2015 STIP.

## **C2. Performance Standards for Highway Operations**

In 2005, NCDOT embarked on the development of performance measures for its highway maintenance and operations functions. These performance measures were established to communicate a statewide strategy for long-term preservation and efficient highway system operation to both our internal workforce as well as and our external customers.

Outcome-based performance measures, such as the amount of low shoulder present or linear feet of guardrail damaged, demonstrate the health and safety of the highway system by rolling up into a Level of Service score which can be used to compare divisions to divisions as well as state to state when common measures are used. It also demonstrates the funding level needed to provide a specific level of service.

To validate these performance targets, NCDOT needed a way to determine if the measures were reasonable both in scope and in cost. The performance measures themselves could be reasonable while the target NCDOT was trying to achieve could be completely unrealistic given the work needed to reach that target. A good example of this is litter. While everyone can agree the performance measure of counting the number of pieces of litter on the ground is reasonable, the target of having only 25 pieces in a sample section could be unreasonable to attain or cost prohibitive. While the roadways would look very clean the cost to attain that high a standard could have been financially overwhelming.

To validate its performance targets, NCDOT took advantage of a bill that would allow NCDOT to enter into up to two performance-based maintenance contracts. The performance measures and targets developed in 2005 were included in the department's first ever Performance Based Maintenance Contract which began in Charlotte in July 2007. The contractor, Infrastructure Corporation of America, was tasked with maintaining 131 miles of interstates in the Charlotte area to the performance targets developed by NCDOT. By tasking the contractor with achieving the same performance targets, the department can determine if these standards are in fact achievable and at what cost. This contract, now in its second year of operation, is providing good data for the evaluation of the performance targets.



### **C3. I-95 Corridors of the Future Program**

In 2007 the states of Virginia, South Carolina, Georgia, Florida and North Carolina cooperatively applied to the United States Department of Transportation's (USDOT) Corridors of the Future Program (CFP) for the Interstate 95 Corridor from south Florida north to the District of Columbia. The CFP seeks to develop national and regional corridors to alleviate congestion on highways, rail or waterways.

The five states proposed to develop priorities and approaches for infrastructure improvements, both physical and operational, in an effort to join to alleviate congestion and improve mobility. These states proposed reconstruction, expansion and use of Intelligent Transportation System ("ITS") technology, among other items, to accommodate future demand in the I-95 Corridor. Specific objectives are to enhance economic development, increase user value, test innovations in financing and contract delivery, and exercise exceptional environmental stewardship.

The designation of I-95 as a Corridor of the Future means that USDOT will give priority consideration to:

- applications under the Transportation Infrastructure Finance Innovation Act (TIFIA),
- applications under the Private Activity Bond authority,
- priority consideration for any annual redistribution of obligation authority (consistent with statutory requirements) and
- priority consideration on any grant applications submitted for discretionary funds for projects on the corridor.

Innovative approaches and opportunities such as this one are helping NCDOT meet its goals of making our network safer, moving people and goods more efficiently and making our infrastructure last longer.

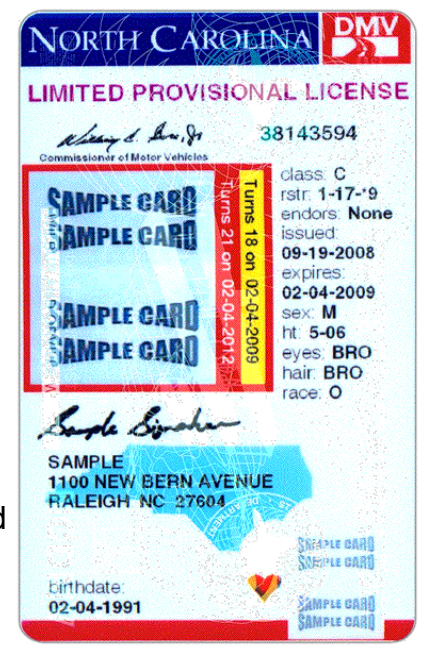


## D. Make Our Organization A Place That Works Well

### D1. Division of Motor Vehicles

The NCDOT's Division of Motor Vehicles continues to improve safety and mobility in North Carolina through many successful initiatives including:

- The Commercial Driver License Unit improves highway safety with the newly created Positive Drug and Alcohol Test Reporting law. During fiscal year 2007- 2008, a total of 449 commercial drivers were disqualified from operating a commercial motor vehicle. North Carolina's program received national recognition and is regarded as a "Best Practice" by the Federal Motor Carrier Safety Administration and has become a model for other states. The N.C. Trucking Association has been a strong supporter of this safety initiative.
- DMV "turned around" the usually horizontal driver license to a vertical format for drivers under the age of 21 beginning Oct. 1, 2008. The new format allows retail clerks to more easily identify underage purchasers of alcohol and tobacco. The new format is not an expense to the state or taxpayers. This change was requested by the N.C. Child Fatality Task Force and passed by the General Assembly as an initiative to reduce teen drinking and driving. Turning the driver license to a vertical format for teens was also supported by DMV's license card vendor, who did not charge the state for the one-time software change.
- In December 2007 DMV added Systematic Alien Verification for Entitlements (SAVE) to aid in the determination of eligibility of applicants for driver licenses. New legislation allows the division to run criminal background checks on all employees connected with issuance of a driver license and to aid in the security of the process. North Carolina processes an average of 300 transactions each day that involve verification of legal presence documents.
- The DMV School Bus and Traffic Safety Group trains, tests and certifies school bus drivers for public and private schools in North Carolina. Each bus driver must have three days of classroom instruction and three days of behind-the wheel instruction. The number of buses needed to transport the most precious cargo in North Carolina, our school children, continues to climb. There were 41,777 currently certified school bus drivers in FY 2007-08, and 11,428 school bus drivers and 626 driver education instructors were trained in that time period.
- Implementation of customer traffic management systems in DMV Drivers License Offices with four or more examiners has allowed the division to monitor customer wait



time. For the month of July 2008 in these 59 offices, the average customer wait time was 25 minutes. This represented 171,666 customers. Of these customers, 47 percent waited less than 15 minutes, which is the Division's target goal for customer service. The average transaction time for customers was 9 minutes in these 59 offices.

- North Carolina enacted legislation that changed DMV's participation in the organ donor program from "intent" to "first person consent". Now, when an applicant indicates to a driver license examiner their wish to be a donor, it is truly first person consent.
- Implementation of on-line Motor Vehicle Records (MVR's) allows citizens to obtain a copy of their MVR via internet rather than having to travel to the Raleigh central office.

These and many other programs demonstrate that the Division of Motor Vehicles is working hard to meet the safety and mobility needs of our state.

## D2. Clayton Bypass, Johnson County

The Clayton Bypass is a new 10 mile, four-lane divided, highway between I-40 and US 70 east of Clayton in Johnston County. Clayton Bypass relieves congestion on existing U.S. 70 and provides motorists traveling to Raleigh or to the coast with an alternate route. \$125 million project was completed and opened to traffic a full year ahead of schedule.

One goal for the Clayton Bypass was to preserve the integrity of every stream, wetland, or environmentally sensitive area near the project. NCDOT demonstrated its environmental stewardship through such features as:

- Hazardous spill basins which prevent potential hazardous material spills from reaching a stream.
- Automated turbidity gauges which measure sediment levels so immediate corrective action can be taken if too much runoff was reaching streams during construction.
- Wildlife crossings which allow deer, raccoons, and other animals to cross under the highway safely and improve motorist safety by reducing collisions.

The Clayton Bypass also included a real time automated time travel information system. This \$1.5 million system included the state's first automated speed detection technology to display real-time travel information, including drive times, on Dynamic Message Signs. Motorists on US 70 are informed of travel conditions ahead and have the opportunity to select the best route based on current conditions. Real-time information is also available through NCDOT's Traveler Information Management System Web site at [www.ncdot.org/traffictravel/](http://www.ncdot.org/traffictravel/) or by dialing 511, the department's toll-free travel information line.



### D3. NC 12 Bridges

NCDOT replaced seven bridges along NC 12 on Ocracoke Island through an expedited unique project that resulted from extensive planning with the affected community and innovative construction practices. The road was closed for only 65 days, 10 days ahead of schedule.



The existing bridges on NC 12 on Ocracoke Island were functionally obsolete and required continual maintenance. After much discussion with the local community a decision was made to close the road when tourism was at it's slowest, and replace all seven bridges within a 75-day window of opportunity. Also a beach detour would be used that would allow four-wheel drive access.

A number of innovative techniques were used in the design and construction of these bridges.

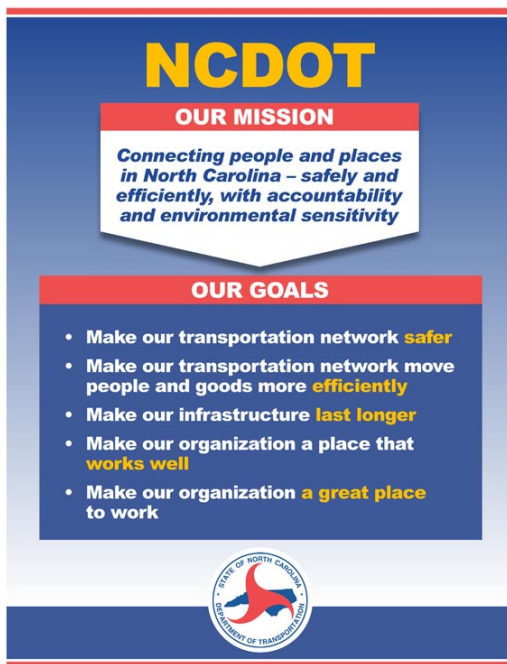
- Composite piles were used for the first time in NC.
- Portions of the existing bridges were used as work bridges during construction.
- Components of the new bridges were pre-cast concrete so there were no delays resulting from getting concrete to the island or having to wait for curing.
- An innovative method of setting and leveling the bridge bent caps precluded the need for extensive false work.
- Multiple crews worked around the clock during much of the construction.

The road was reopened to traffic on March 5, 2008 and represents what can be accomplished with good planning and coordination and dedicated efforts of the contractor, community and NCDOT. NCDOT is exploring opportunities to use similar innovative construction and contracting techniques on other projects across the state to deliver projects more quickly and with less impact to the public during construction.





## D4. NCDOT's Transformation



In 2007 NCDOT began an internal transformation process of changing its management culture to a new results-based, accountable, performance organization.

Transportation Secretary Lyndo Tippettt appointed a Transformation Management Team (TMT), along with the consultation services of McKinsey & Company, to begin this multi year process. He asked 19 NCDOT employees to work full time on this project, with the task of designing and implementing a “transformed” NCDOT based on McKinsey’s recommendations and guidance.

To ensure a successful outcome, the TMT strategically analyzed data from all parts of the department. Various methods of delivering projects, developing performance metrics, and preparing NCDOT for the 21st Century were evaluated to ensure the most beneficial outcome and smoothest transformation to a results-based organization.

The transformation effort focused on the following areas:

**Performance Accountability:** NCDOT has instilled performance accountability through a public facing “Performance Dashboard” that tracks departmental progress toward five goals. The dashboard is located on NCDOT’s Web site at [www.ncdot.org](http://www.ncdot.org). Top managers’ individual performance assessments are tied to these same goals through a system of “metrics” or performance measurements. This allows managers to measure each business unit’s contributions to meeting the mission and goals.

**Strategic Direction:** NCDOT developed a strategic direction for the department by creating new mission and goal statements and identifying strategic leadership roles. The team initiated an in-depth look at the efficiency and effectiveness of internal services, and the mission and products of all departmental business units.

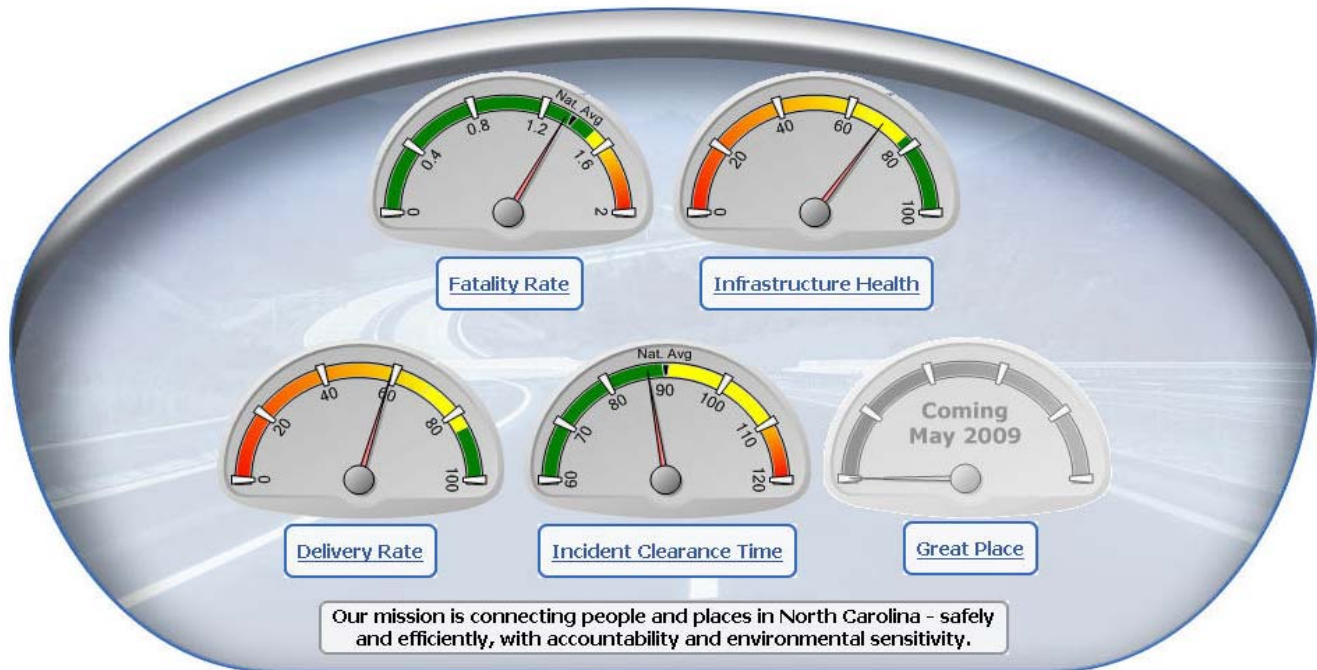
**Planning and Prioritization:** NCDOT developed a new conceptual strategic planning and prioritization process and has engaged external partners in discussions to determine the feasibility of the new processes. The Strategic Planning Office of Transportation was created to facilitate this process.

**Program and Project Delivery:** NCDOT streamlined program and project delivery by recommending process improvements to deliver projects in the statewide Transportation Improvement Program more quickly and efficiently, improve the condition of North Carolina’s bridges and more strategically address mobility issues throughout the state.

**Talent Management:** The term “talent management” refers to the way the department recruits,

retains and develops its employees. Based on results of a diagnostic survey and many subsequent interviews with DOT managers and employees, NCDOT has recommended and implemented changes in these areas. NCDOT also created Core Values, the behavioral standards to which employees will be held accountable in their individual performance evaluations. Additionally, a new employee performance management system called a “Personal Dashboard and Appraisal” has been implemented.

The transformation effort will help NCDOT meet current and future challenges by enabling us to better “connect people and places in North Carolina – safely and efficiently, with accountability and environmental sensitivity.”



[More information on NCDOT's transformation and organizational performance efforts.](#)

## **D5. Incentive Pay Programs**

NCDOT currently has pilot incentive pay programs for Road Oil and Pavement Markings. These programs allow the Department to increase efficiency and productivity by allowing small incentive payments to employees based on quantifiable measures and production schedules. Payments are calculated based on exceeding previous year's production rates, maintaining good safety records and approaching the work as a team and are limited to half of one percent of the program's budget.

The Incentive Pay Program has increased productivity rates in Road Oil and Pavement Markings. Road Oil production has increased from 81 square yards per man hour in 2001 to 122 square yards per man hour in 2007. Similarly, Pavement Marking production has increased from 1,260 linear feet per man hour in 2005 to 1,807 linear feet per man hour in 2007. Since its inception, the Road Oil Incentive Pay Program has boosted production by 51 percent at a cost of around one quarter percent of their budget and the Pavement Marking Incentive Pay Program boosted production by 27 percent at a cost of around one-half percent of their budget. The programs have been successful at increasing production at a very reasonable cost.

Benefits to the state of both programs include:

- Higher productivity
- More efficient operations
- More miles paved
- More roads striped
- Lower unit costs

These incentive pay programs harness the power of our employees by promoting employee initiative and encouraging creative thinking.

## **D6. Floodplain Mapping Memorandum of Agreement**

In early 2008, NCDOT was experiencing difficulty getting Federal Emergency Management Agency (FEMA) approvals for some bridge replacement projects that crossed streams that are regulated by FEMA. This delayed some of the Department's project lettings for these projects. To address this issue, NCDOT worked jointly with the N.C. Floodplain Mapping Program, an office within the Division of Emergency Management in the Department of Crime Control and Public Safety. The agencies developed a memorandum of agreement that ensures compliance with FEMA regulations and provides timely receipt of FEMA permits.

For example, the FEMA review and approval process, which usually took eight to 10 months, was reduced to three months. This allows resolution of FEMA issues at least six months before the project letting date. This agreement was executed on June 5, 2008 and has already reduced the number of bridge project letting delays.



## E. Make Our Organization A Great Place To Work

### E1. Talent Management

The department has implemented new talent management strategies to improve its ability to attract and retain our most valuable asset, our people.

- The top 150 leadership positions at NCDOT are now using a new results-based performance management system. All employees will use the system beginning April 2009. Each employee will have an individual Performance Dashboard and Appraisal (PDA) that includes metrics, enforces our new values (safety, customer service, integrity, diversity and quality), and addresses development opportunities. This tool links the important things employees do each day to the organizational performance shown on the gauges on our dashboard.
- A new talent focused Website is in place that highlights the wide range of careers at NCDOT. Employees' testimonials, highlighting hard to fill positions, and answers to "frequently asked questions" are just some of the new features. This is an excellent recruitment tool for new employees and exposes current employees to other opportunities within a career path. Our goal is to attract and keep employees that want to grow in a career and make a difference.
- We have streamlined the hiring process including
  - More descriptive job postings,
  - More flexible job posting timeframes
  - Streamlined qualification review
  - Streamlined approval process, and
  - Improved employee orientation

To meet our goals as a department we must put the right people in the right jobs with the right skills.



## E2. NCDOT Heros

**Able Body Seaman Tina Meekins** saved the life of a young man who began to drown as flounder gigged with his family on Ocracoke Island. Meekins rescued the boy and cared for him until the rescue squad arrived and treated the young man.

**Members of the Hatteras Inlet Ferry Crew** assisted with a medical emergency. An infant in the line of vehicles waiting for the next ferry trip was in need of medical attention. The captain immediately returned to the dock while his crew removed a vehicle from the ferry so the vehicle carrying the ill child could board. An ambulance met the mother and infant close to the ferry ramp.



Secretary Tippet recognizes Tina Meekins

**MV Floyd J. Lupton Capt. Pete Avery, Crew Mate Sonny Golden, Chief Clifton Graham, Oiler Elbert Jones and Crewmember Ritchie Smith** responded to a call from the U.S.Coast Guard for assistance during a thunderstorm to rescue a woman whose boat had lost its sails and could not gain steerage. Avery positioned the ferry between the wind and the distressed boat and provided a break for the boat to recover its sails and engage its outboard.



MV Floyd J. Lupton Crew



IMAP driver assists motorist

**IMAP Driver Jimmy Brown** came upon a driver who had broken down on I-440 in Raleigh. Brown took the woman's two young daughters and mother to a safe place while she stayed in the car to wait for a tow truck. Within minutes the car was struck from behind. The woman was hospitalized for a few days; however, it could have been worse as the two child safety seats in the back were crushed.

**Electronics Technician Leslie Newbern** came upon a serious accident where a vehicle was on fire and the driver was seriously injured and unresponsive. He entered the truck, stabilized the victim until help arrived and checked for fire in the cab.

**NCDOT State Intelligent Transportation System Travel Information Engineer Jo Ann Oerter** received a "2008 Coalition Champion Award" for her dedication and commitment to the I-95 Corridor Coalition. The honor recognized her efforts to coordinate and enhance traveler information throughout the I-95 corridor.



Jo Ann Oerter receives award

## F. Stewardship

### F1. Green Welcome Center, Wilkes County

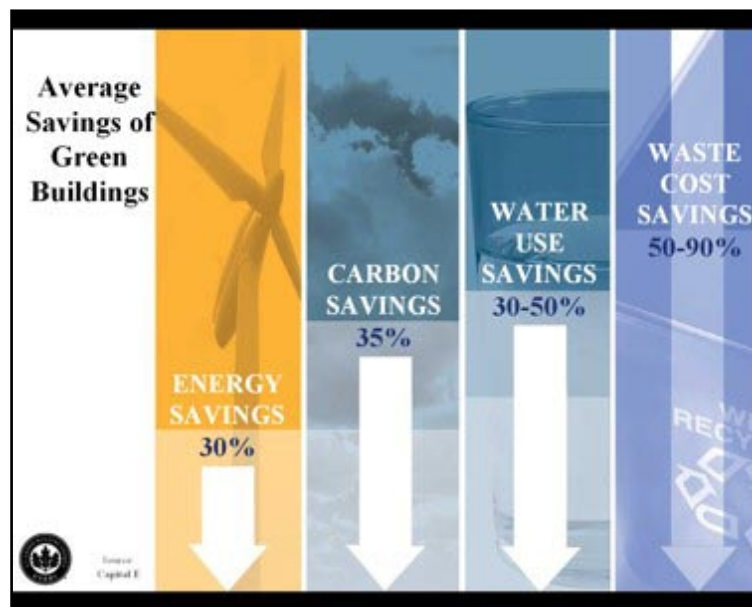
NCDOT's statewide rest area system compliments and improves the safety of the highway system. Approximately 27 million people visited a North Carolina highway rest area in 2007.

While the primary function of the safety rest area system is accident prevention, the department also showcases environmental stewardship at our facilities. The US-421 Wilkes County Rest Area/Visitor Center is the Department's first attempt at a Leadership in Energy and Environmental Design (LEED) certified building.

The site and building will showcase a number of environmentally friendly strategies including:

- Daylighting of the building reduces energy consumption
- Photovoltaic panels on the roof generate a portion of the power for the building
- Solar hot water panels on the roof to heat water used in the building.
- Rainwater collected from the roof is used to flush toilets and urinals
- Low flow plumbing fixtures
- Site runoff/storm water treatment via bioretention basins naturally reduces pollutants
- Trees, shrubs and forbes are native plants; native species seeding will be used for most of site
- Recycling of construction debris and waste and visitor waste
- Light pollution reduction – 'night sky' friendly fixtures
- Preferred parking for fuel efficient, low emission vehicles and carpoolers

The project is currently under construction, with a completion date of September 2009. Informational signage will be in and around the rest area educating the public about the different environmental strategies used in the project.



## F2. Litter Programs

The state's litter prevention campaigns combine three components:

- Litter cleanup
- Education/prevention
- Enforcement

### Litter Clean Up and Inmate Labor

In calendar year 2007, NCDOT spent more than \$16.5 million to remove over half a million bags of litter. Except for Wake County, litter removal efforts remained consistent with the previous year. An inmate fatality in Wake County resulted in the N. C. Department of Correction (NCDOC) suspending Wake County inmate litter crew operations. A sharp spike in highway litter subsequently occurred in the county. NCDOT and NCDOC have since implemented additional traffic control measures for inmate litter removal and are operating successfully. Statewide inmate labor costs for litter removal are \$16 million.



### Litter Clean Up and Adopt-A-Highway

The Adopt-A-Highway (AAH) program cost \$257,772 in 2007. Approximately 6,000 groups participate in the program and 12,000 roadside miles are adopted. AAH volunteers collected over 3.6 million pounds of litter, and their efforts saved the state's taxpayers more than \$5.9 million last year.

### Prevention Partnerships

NCDOT partners with N.C. Departments of Correction, Crime Control and Public Safety, Environmental and Natural Resources and Wildlife Resources Commission to collectively support statewide litter prevention efforts. In addition, NCDOT partners with N.C. Keep America Beautiful, N.C. Big Sweep and The Boy Scouts of America to reduce litter. The department's Office of Beautification Programs promotes litter prevention at conferences and the State Fair, sponsors Tarp Day at landfills statewide, and provides litter prevention promotional items to a multitude of local organizations.

### Prevention/Education

**Swat-A-Litterbug Program:** The Swat-A-Litterbug Program is an educational tool to inform people observed littering that they are breaking the law. When citizens report observed littering a letter signed by the Colonel of the State Highway Patrol is mailed to the registered owner of the reported vehicle that reminds the recipient that littering is a fineable offense. There are no citations or warnings issued from these anonymous reports. NCDOT issued 7,800 Swat-A-Litterbug letters in calendar year 2007.



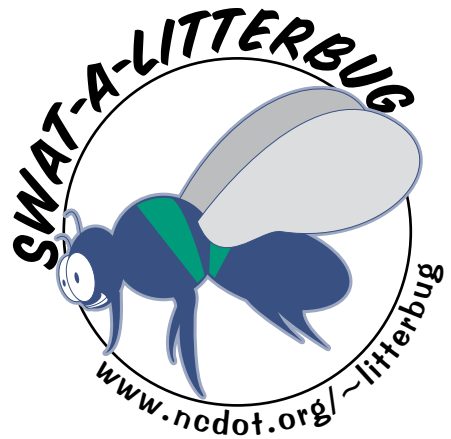
## Education / Enforcement

2007-2008 Litter Prevention Campaign Focus:

Last year, the NCDOT placed an emphasis on the enforcement component of its litter reduction strategy. About half roadside litter comes from vehicles or trailers traveling with unsecured cargo. The following steps were implemented to address this problem.

- Created the “Secure Your Load” brochure highlighting the importance of the issue.
- Included one million “Secure Your Load” fliers in DMV registration renewal mailers.
- Distributed brochures, car litterbags and 6,000 tarps at 45 county municipal landfills and convenience centers enabling us to reach residents traveling with unsecured loads directly.
- Coordinated campaign with the Highway Patrol to insure support.

Due to the emphasis on enforcement efforts, the number of charges for littering violations increased in 2007.

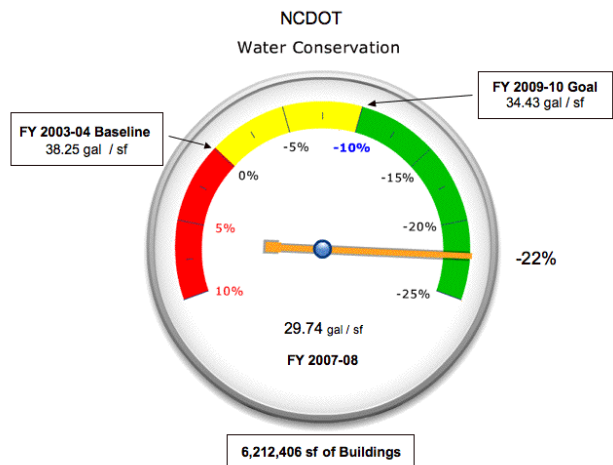
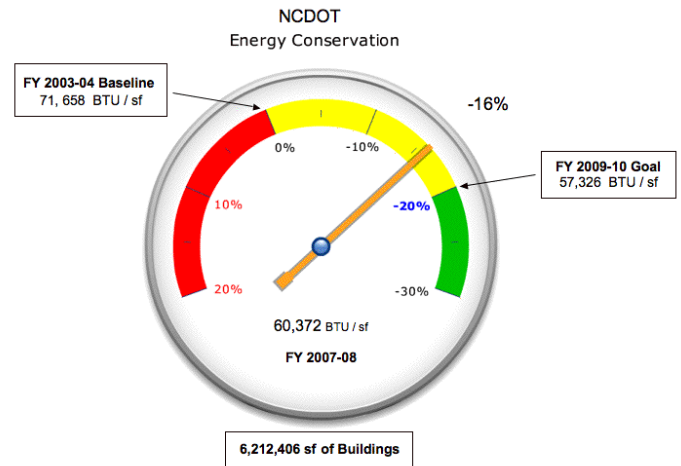


### F3. Recycling & Conservation

NCDOT Division of Highways has embraced a “Reduce/Reuse/Recycle” (3R) Program across the state. In 2007, NCDOT reduced our waste stream by 5 percent and used significant amounts of recycled products and solid wastes in our construction and maintenance projects. The growth in the program reflects our employees’ commitment to conserve resources, reduce operating costs and transform waste materials into usable resources.



Also, NCDOT reduced energy and water use in its facilities. From fiscal year 2004 to fiscal year 2008, NCDOT decreased the usage levels for building energy use by 16 percent and decreased water use by 22 percent. NCDOT estimates the total avoided costs for the four years to be \$5.7 million.



Reused Materials 2007-2008	Quantity	Unit of Measure
Aggregate Base Course	2569.7	Tons
Concrete Pipe	1164	Linear Feet
Guardrail	15135	Linear Feet
Portable Concrete Barrier	770	Linear Feet
Sign Posts	1276	Each
Signal Heads	80	Each
Sign	1289	Each
Steel Beams	93500	Pounds

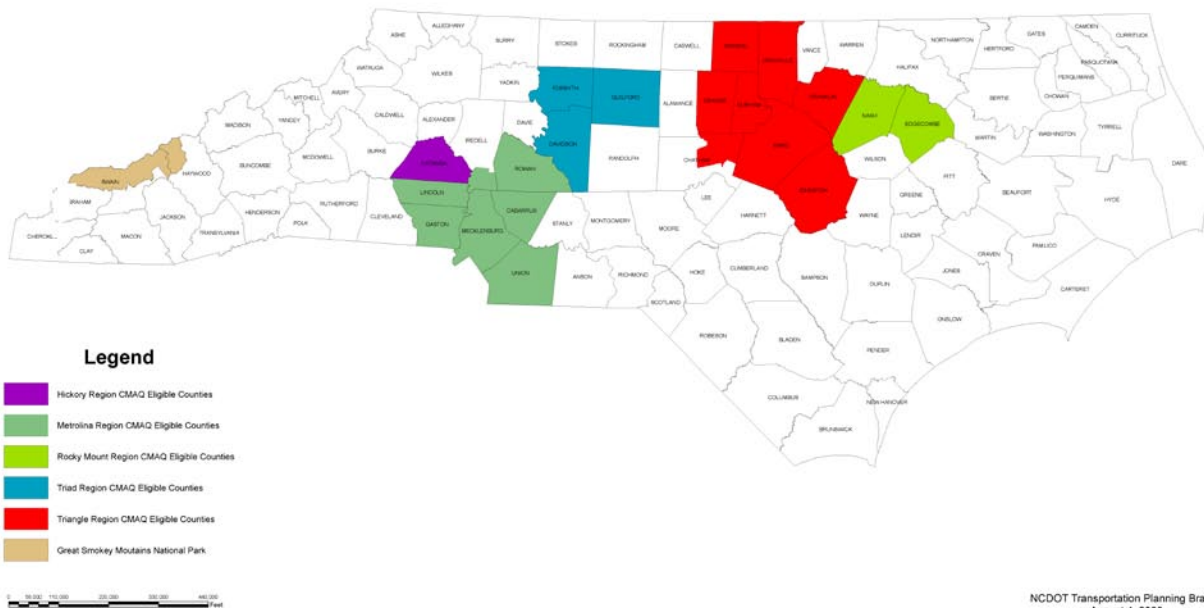
#### F4. Congestion Mitigation and Air Quality Program

Congestion Mitigation and Air Quality (CMAQ) is a Federal program that funds transportation projects and programs in air quality nonattainment and maintenance areas to help achieve and maintain national standards for air quality pollutants. In North Carolina, NCDOT administrates this program. The areas receiving funding through this program are illustrated in the figure below.

Since the program's inception as a part of the Intermodal Surface Transportation Equity Act in 1991, NCDOT has provided CMAQ funding for various projects in air quality nonattainment and maintenance areas on an ad hoc basis. In an effort to streamline the program, NCDOT instituted changes to the process for funding CMAQ projects by issuing a call for projects to be locally administered within North Carolina's non-attainment and maintenance counties. About 100 projects were selected for funding across the state in nonattainment and maintenance counties, totalling nearly \$152 million.



CMAQ Eligible Counties in North Carolina



In addition to developing a robust set of projects that meet the goal of the CMAQ program, many of the current CMAQ initiatives can be directly tied to the NCDOT mission of connecting people and places in North Carolina – safely and efficiently, with accountability and environmental sensitivity. Specifically, there are several projects that, in addition to helping reduce the emission of harmful air pollutants, actually help to make our transportation network safer and help move people and goods more efficiently. This includes projects that expand and improve transit fleets, update and computerize city signal systems, add turn lanes at intersections and construct bicycle and pedestrian facilities. The following table shows the total funding dedicated to these types of projects undertaken or planned for the 2006 to 2013 time period. Overall, these projects account for just under half of the total CMAQ funding programmed in North Carolina.



<b>Project Types</b>	<b>Total Funding</b>	<b>% of CMAQ Program</b>
Transit Fleet Expansion & Improvement	\$ 14,762,618	9.7
Signal System Upgrades	\$ 31,713,600	20.8
Turn Lane Additions	\$ 6,812,714	4.5
Bicycle & Pedestrian Facilities	\$ 12,253,588	8.0
<b>Totals</b>	<b>\$65,542,520</b>	<b>43.0</b>

Recent efforts to improve this program in North Carolina are anticipated to increase the percentage of implemented projects meeting the goals of both CMAQ and NCDOT.

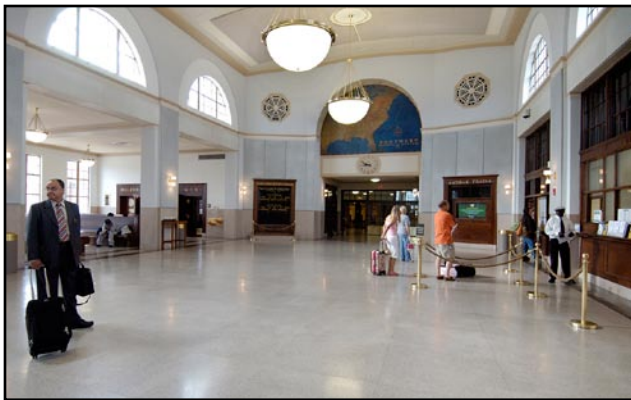


## F5. Rail Station Rehabilitation Award

On Oct. 4, 2007, the National Trust for Historic Preservation awarded the NCDOT Rail Division the John H. Chafee Trustees Award for Outstanding Public Policy. This is the highest award that the National Trust for Historic Preservation bestows. The National Trust acknowledged that the NCDOT Rail Division has expended in excess of \$75 million “more than any state agency in the nation,” towards the rehabilitation of historic buildings. The trust also stated that “while the restored depot buildings present state of the art twenty-first century transportation facilities for trains and other modes of transportation, the private sector has responded in kind rehabilitating scores of privately- owned buildings surrounding the depots. This has greatly improved the economic base of each community.”



The restored Hamlet Train Depot which reopened in October 2004



The main concourse of Greensboro's Douglas J. Galyon Train Depot

In 1991, NCDOT joined federal agencies and local governments to reinvigorate the state's passenger rail network. As part of this effort, a bold decision was made to restore historic train stations across the state – a decision that has brought these long-neglected landmarks back to life. So far 12 stations include depots located in Greensboro, Fayetteville, Hamlet, High Point, Marion, Morganton, Old Fort, Rocky Mount, Salisbury, Selma, Southern Pines and Wilson have been rehabbed with more to come. Built between the 1860s and the 1920s and representing a wide range of architectural

styles, the stations have been given sensitive makeovers that spotlight their distinctive design features while allowing them to function efficiently in their historic role as community gateways.

Richard Moe, president of the National Trust said, “Thanks to the bold and innovative leadership of the North Carolina Department of Transportation Rail Division, a new generation of travelers will have a chance to experience the romance of the rails. Already, this program has renewed citizens' pride in their local heritage and created a viable transportation alternative for the public – and it's not finished yet.”



The exterior of the historically renovated Douglas J. Galyon Train Depot in Greensboro

## F6. Alternative Fuel Usage

NCDOT has been a leader in researching and using alternative fuels since the mid 1990's. NCDOT was one of the first state fleets to comply with the Energy Act and Clean Air Act. Our use of B-20 and E-10 fuels has reduced harmful emissions, particularly in air quality non-attainment areas. NCDOT is installing five E-85 fuel sites around the State to further reduce emissions and dependence on petroleum based fuels.

NCDOT has conducted research with N.C. State University concerning "real world duty cycle" tests and the effects of B-20 on the reduction of nitrous oxides (NOx). Contrary to U.S. Environmental Protection Agency (EPA) and other lab tests showing a slight increase in NOx for B-20 use, our tests show that when the equipment is put to use under real world conditions there was a substantial decrease (approximately 10 percent) in NOx levels. This is ground-breaking research which is prompting EPA and other researchers to rethink how they test for emissions.



## VII. Operating Environment

The economic prosperity the state has enjoyed for several years has placed a higher demand on the entire transportation network. North Carolina has undergone a transition from an economy based on the traditional industries of tobacco, furniture and textiles to one increasingly driven by knowledge-based enterprises.

This success translates into a population increase, which is among the highest in the country, along with a higher use of the transportation system. The amount of freight moving within the state, as well as to and from the state, has increased as a result of the economic prosperity.

This growth has occurred at a time when construction costs have skyrocketed due to inflation and national and international demand.

State revenues have not been able to keep pace with the growing demand. The result is more congestion with less new miles of roadway to address needs and the deterioration of the existing transportation infrastructure.

A strong transportation system is vital to North Carolina's economic prosperity and high quality of life for our citizens. Growing demands on our system coupled with decreasing funding make it increasingly difficult to meet the 21st century transportation needs of our state. NCDOT is addressing this challenge by transforming to be more accountable in delivering a safe, efficient and long lasting multi-modal transportation network.

### North Carolina Key Facts

#### On the ground

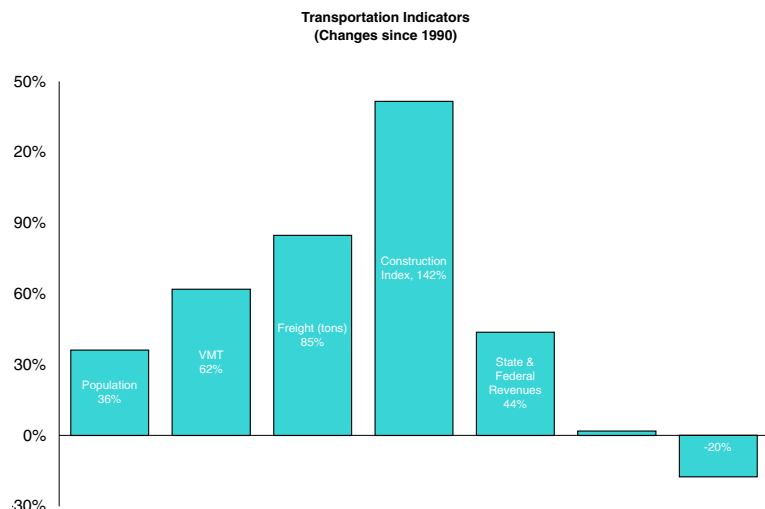
- 9,061,032 estimated population
- 6.5 million licensed drivers
- 6,747,163 registered passenger vehicles
- 8.5 million registered vehicles
- 103,598 million miles traveled per year
- 1,696,542 trucks on the road per year
- 1,109 miles of Interstate highways
- 13,762 miles of primary highways
- 64,391 miles of secondary highways
- 18,018 structures and bridges statewide
- 106 transit systems
- 5.5 million people have access to transit
- 550,000 rail passengers

#### In the air

- 74 publicly-owned airports
- 300 privately owned airports and heliports
- 47 million passengers served
- 7,000 registered aircraft
- 800 million pounds of air freight
- \$11.8 billion economic impact

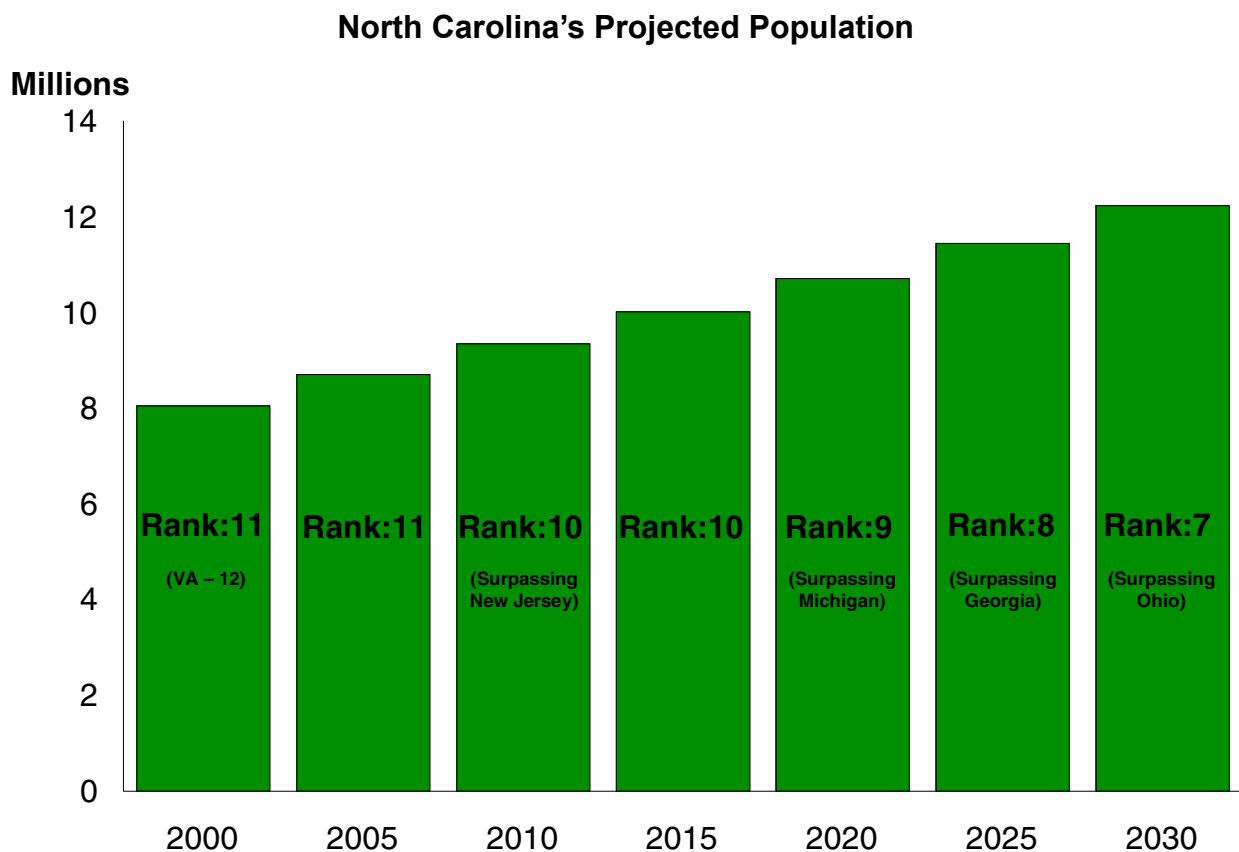
#### On the water

- 24 ferries, second largest in the nation
- 2.4 million passengers carried annually
- 1 million vehicles carried annually



## Population

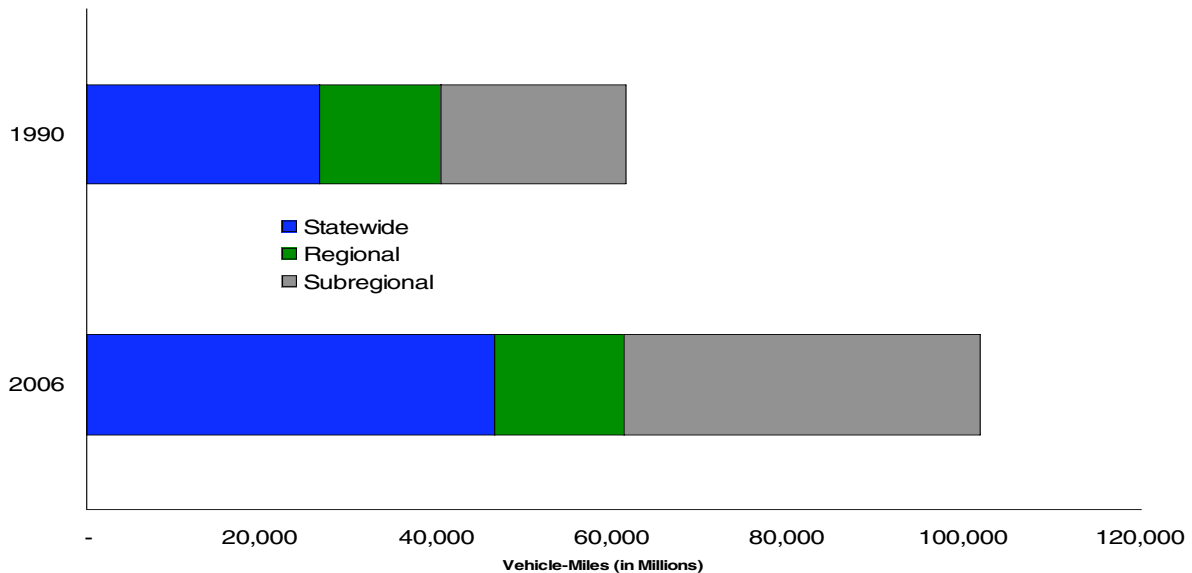
The U.S. Census reported the state's population at 6.63 million inhabitants in 1990. This number had grown to 8.05 million by 2000. The 36 percent growth in population between 1990 and 2007 is expected to continue for the foreseeable future. North Carolina's population is expected to increase about 12.22 Million by 2030, which would place the state as the seventh most populated state in the country. The population growth between 2000 and 2030 is equivalent of the entire population from neighboring South Carolina in 2000 moving into North Carolina by 2030.





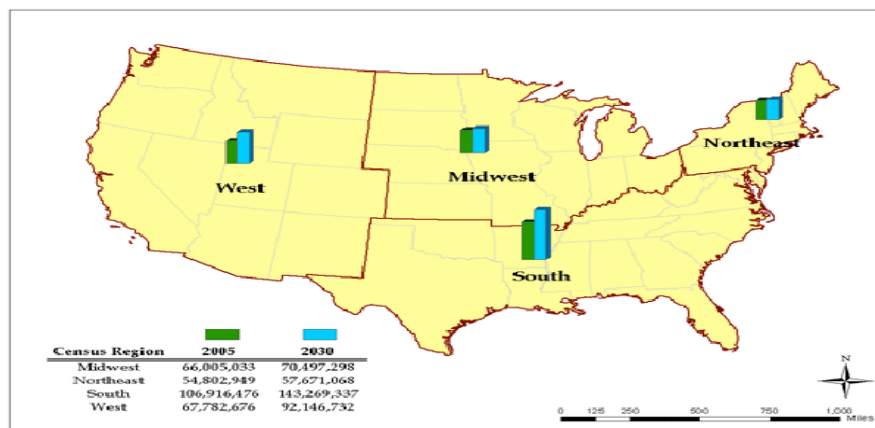
## Vehicle Miles Traveled (VMT)

A vehicle mile traveled or VMT is an indicator that measures roadway usage as defined by a vehicle traveling one mile. The measure can be used as a congestion and condition indicator. The information is collected annually as part of the Highway Performance Monitoring System (HPMS) which is a national level highway information system that includes data on the extent, condition, performance, use and operating characteristics of highways. From 1990 to 2006, North Carolina's VMT (in millions) grew from 61,236 vehicle-miles to 101,515 vehicle-miles. The following table depicts the growth by tier.



*Note: The Transportation Tier system was not officially adopted until 2004, however by using the 1990 and 2006 roadway functional classifications a fairly good approximation can be made. For More information on North Carolina's tierd system visit [http://www.ncdot.org/doh/preconstruct/tpb/SHC/pdf/NCMIN\\_definitions.pdf](http://www.ncdot.org/doh/preconstruct/tpb/SHC/pdf/NCMIN_definitions.pdf).*

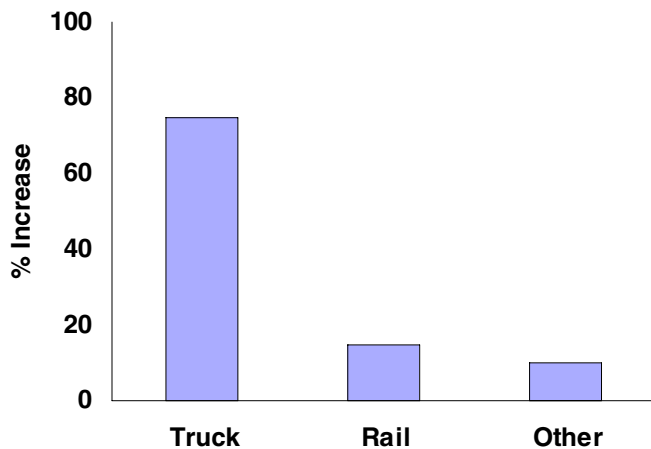
The National Cooperative Highway Research Program Bottom Line Analysis for Highways (2007-8) and American Association of State Highway and Transportation Officials suggest VMT growth nationally will moderate (less than 2 percent increase per year). However population growth in the Southeast is expected to grow at a rate higher than any other regional area by 2030 (<http://www.interstate50th.org/docs/techmemo4.pdf>). Coupled with a suburbanizing land use pattern and increased freight movement through southeast ports, an aggressive VMT forecast (2 to 3 percent increase per year) for North Carolina is warranted.



## Freight

Globalization, competitive industry trends and new technologies are pushing freight volumes to grow faster than the state's overall population and traffic growth. Manufacturers and farmers rely on the freight system to ship North Carolina-made products to local customers, and to U.S. and worldwide markets. The value and volume of goods moving in these freight systems is huge and growing.

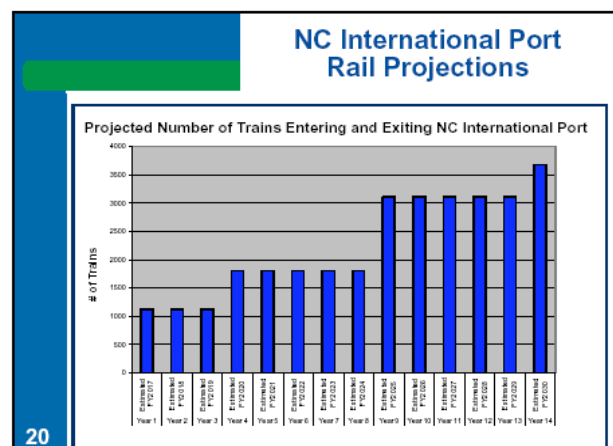
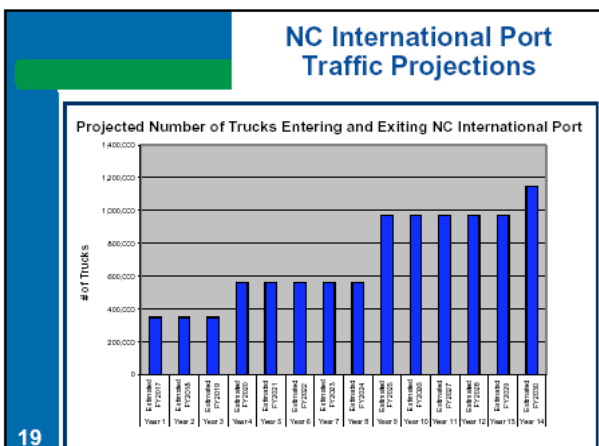
Specific highway improvements have been made to enhance access to manufacturing and warehouse facilities. Many physical road/rail grade separations and at-grade crossing improvements have also been made over the years improving the flow of people and goods. Access improvement to airports and the ports have been made as well.



Increasing freight movement raises concerns about the strain and wear on the state's transportation system. According to the 2008 Statewide Logistics Plan total freight volumes will increase from 580 million tons in 2002 to 990 million tons by 2035 – a 71 percent increase. The adjoining chart depicts which transportation mode will experience the greatest growth. Other growth shown includes air, sea, and pipelines.

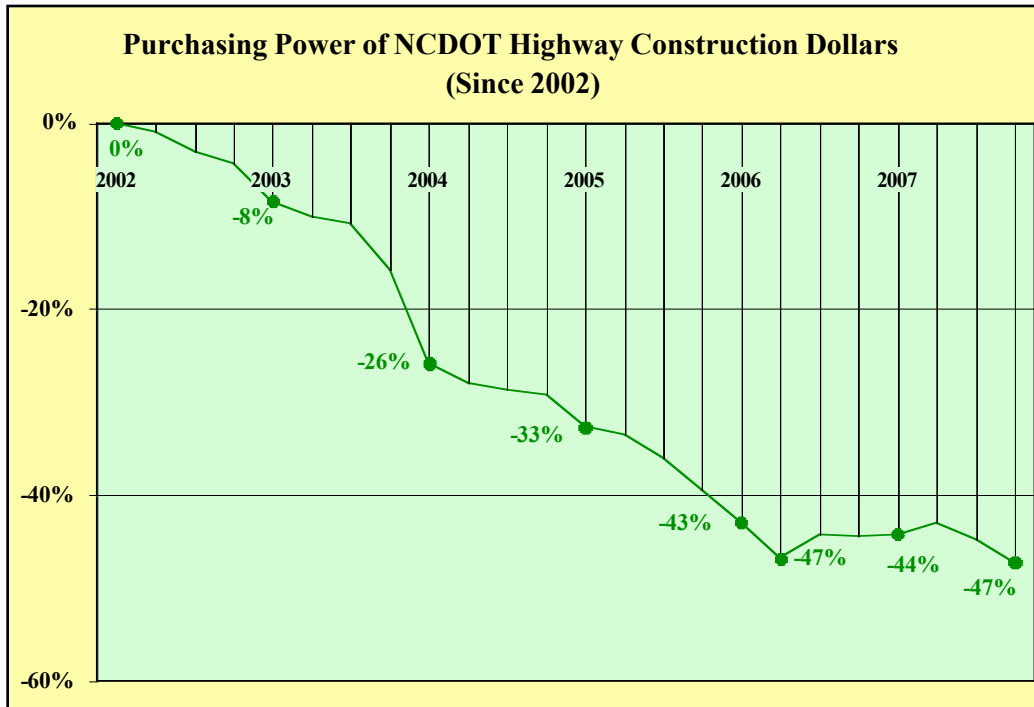
## Logistics Planning

Freight demand on the state's transportation system will also be compounded by the development of a new International Port Terminal in Southport. Expected to be operational by 2017, this new terminal will be the largest of its kind in the state's history and one of the largest on the east coast. By 2030, 4,400 trucks and over 10 trains per day are projected to enter and exit this facility.

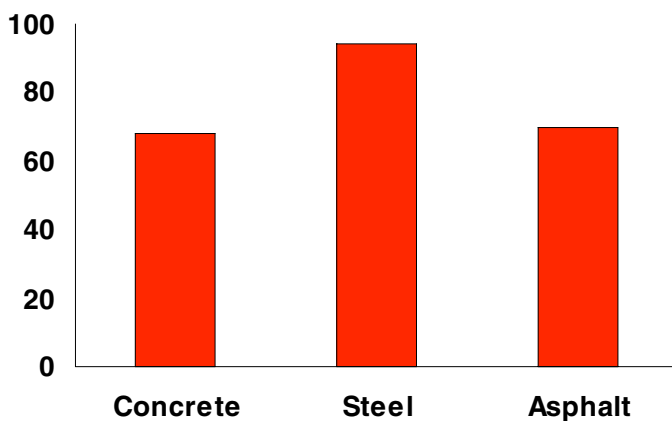


## Construction Index

For the past several years, the North Carolina Construction Index, which reflects the prices of construction materials that go into projects plus items consumed by contractors, has risen faster than the consumer price index. Another way to look at this change is to show the decrease in buying power which declined by 47 percent between 2002 and 2007 as shown in the chart below.



**Specific Material Inflation  
(2002 to 2007)**



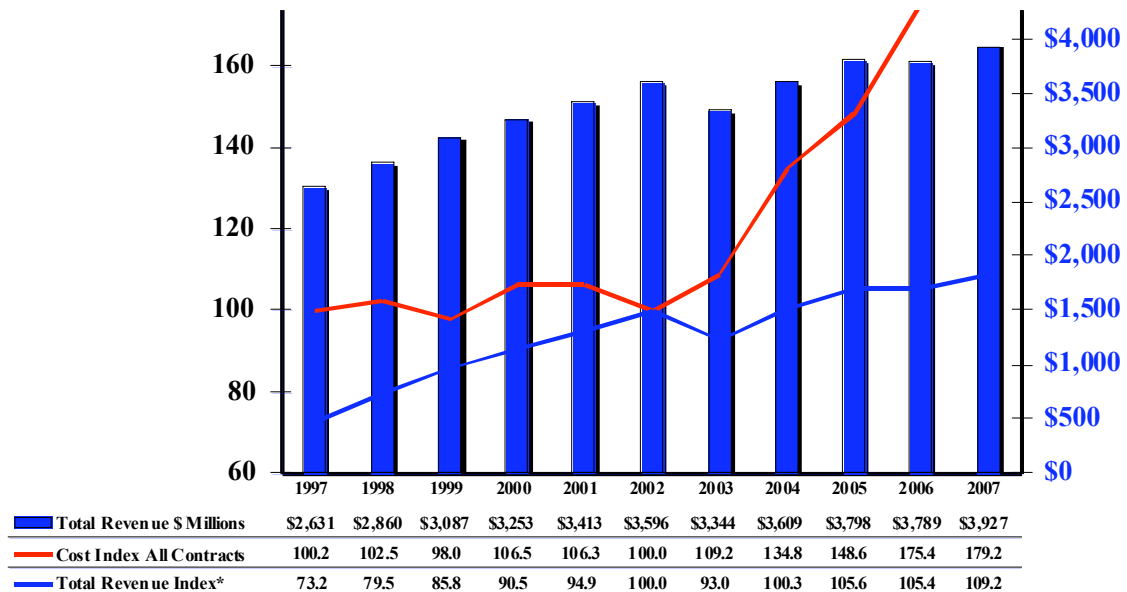
Much of the decline in NCDOT's purchasing power is due to world demand of construction materials such as steel and cement. In addition, the volatility in world oil prices has driven the cost of asphalt to record levels as can be seen in this chart.

This rapid growth has occurred at a time when construction costs have skyrocketed due to national and international demand. The costs of steel, concrete and asphalt have increased by over 79 percent since 2002.

## Cost Index and Total Revenue

The state's transportation revenues have remained flat or declined while the cost of construction has risen sharply – in effect cutting NCDOT's purchasing power in half.

**NCDOT Composite Cost Index and Total Revenue**



\* Revenue Index scaled to 100 in 2002.



## State Revenue

Gas tax revenues have decreased as people reduce fuel consumption to save money. In fiscal year 2008, revenues from the gas tax dropped 1.5 percent or roughly \$24 million. People are also buying fewer and less expensive vehicles, which has led to a reduction in the amount of money collected from the Highway Use Tax. In fiscal year 2008, revenues from the Highway Use Tax dropped 7 percent or about \$46 million.

State transportation revenues have three main sources as shown in the chart below:



Motor Fuel Tax 55%

Highway Use  
Tax 25%

DMV Fees  
20%

The state motor fuel tax (MFT) started being collected in 1921 at a fixed rate of 1cent per gallon. A variable rate structure was implemented in July 1986 as a way to hedge construction inflation. Currently, the formula is based on a fixed 17.5 cents per gallon plus a variable component determined by 7 percent of the average fuel wholesale price. The tax rate is subject to change in January and July of each year based on computations made by the N.C. Department of Revenue. The General Assembly capped the gas tax at 29.9 cents per gallon through June 30, 2009. Many of the Division of Motor Vehicle fees had not been raised in about 20 years until 2005. The Highway Use Tax (HUT) was approved as a new revenue source as part of the 1989 NC Highway Trust Fund. The table below details the historical changes in these three revenue sources over time.

	MFT	DMV	HUT
1990	\$ 804.6	\$ 309.4	\$ 164.7
2007	1,597.2	711.4	605.0
Growth	96%	135%	283%
Growth Adjusted for Inflation (CPI)	24%	44%	130%

Note: the Highway Use Tax effective collection date was October 1, 1989.

## Federal Revenue

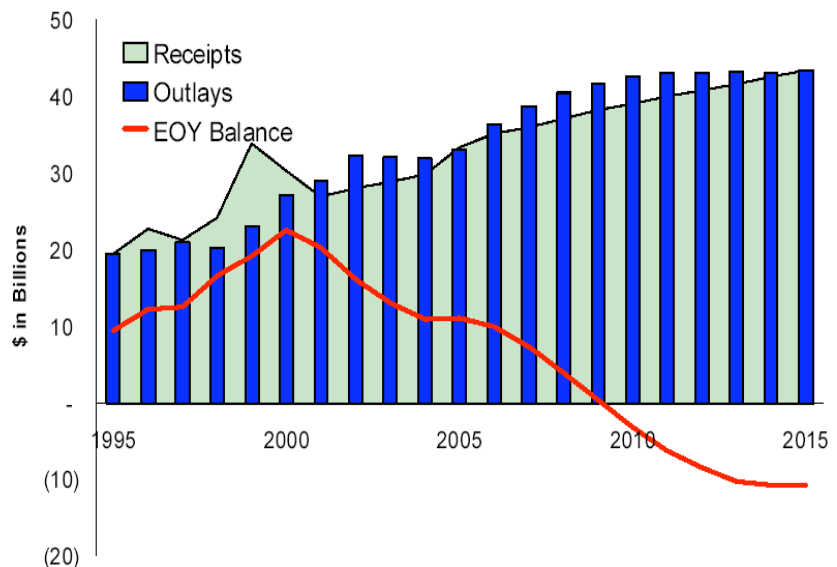
Approximately 25 percent of the Department's annual revenue is from the 18.4 cents per gallon gasoline and 24.4 cents per gallon diesel motor fuel tax and other fees. The U.S. Congress authorizes and sets the rate which is set to expire September 30, 2011. The federal motor fuel tax was first collected in 1932. Congress approves a multi-year surface transportation bill that determines future yearly authorization amounts subject to an annual obligation limitation and rescissions. The last reauthorization bill Safe, Accountable, Flexible, Efficient Transportation Equity Act; Legacy for Users (SAFETEA-LU), was signed into law on August 10, 2005 some 22 months after the previous authorization bill had expired. SAFETEA-LU is set to expire on September 30, 2009.



Motor Fuel Tax 92%

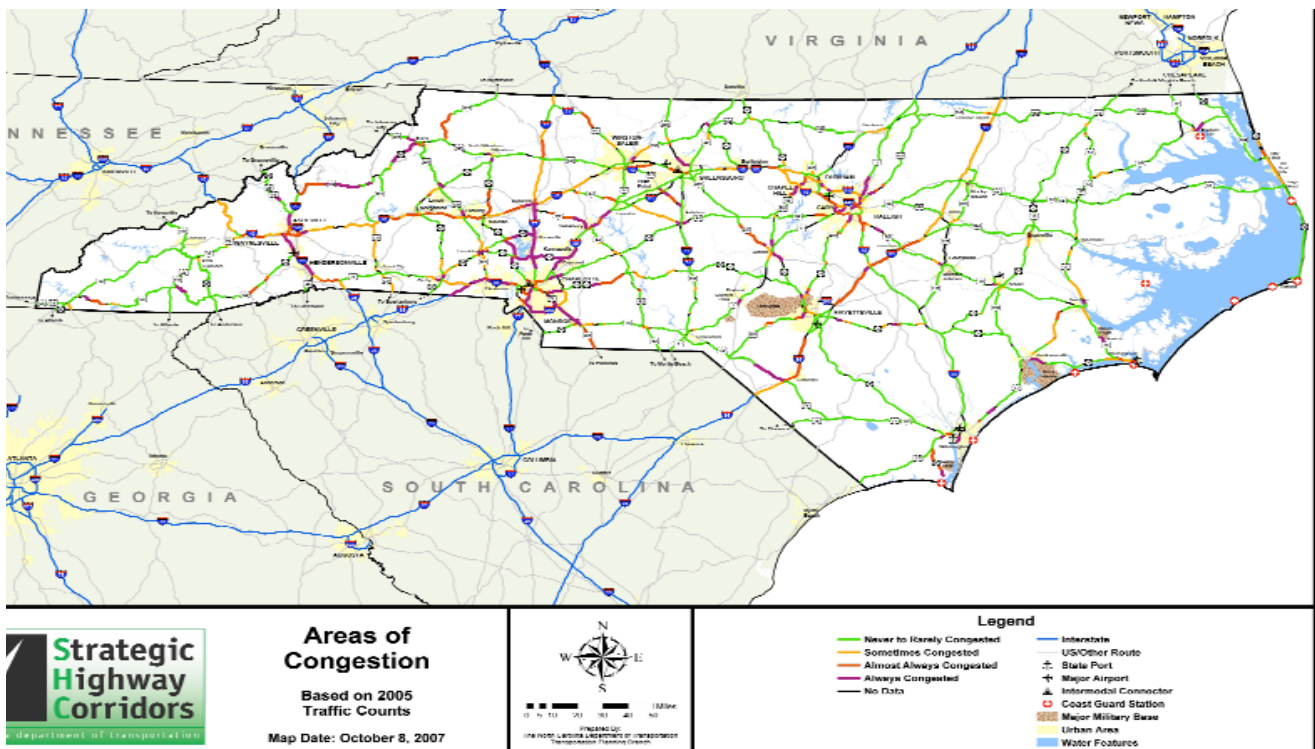
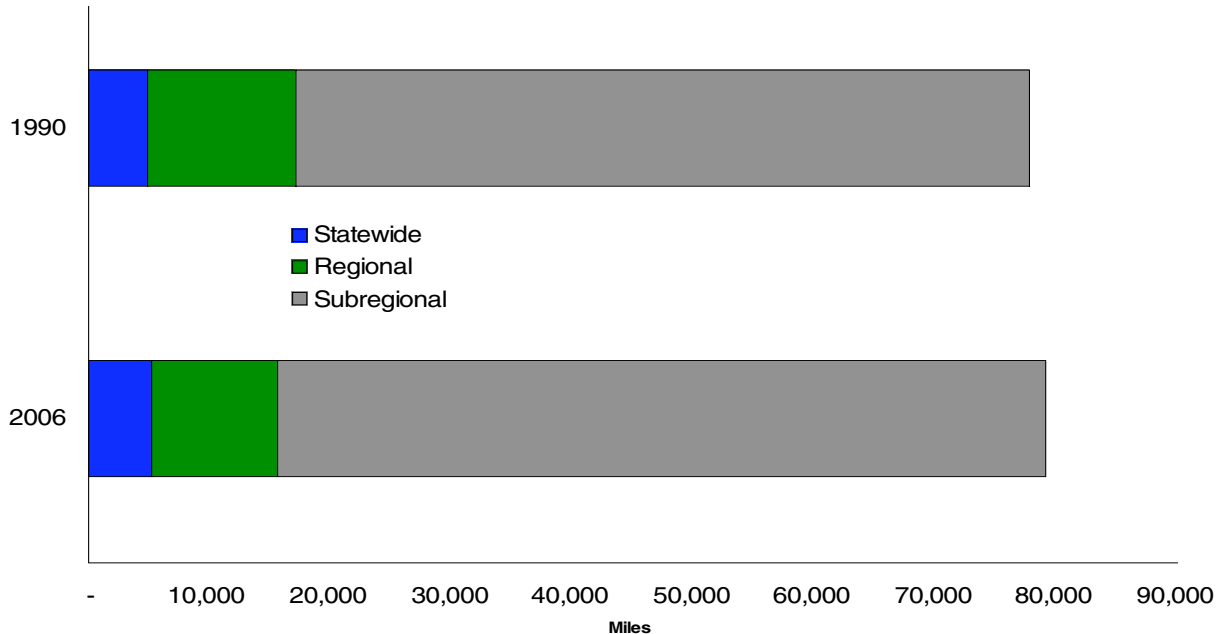
Fees 8%

A combination of record expenditures (outlays) and decrease in revenues (receipts) had projected the Federal Highway Trust Fund running out of cash in federal fiscal year 2009. However, due to the unexpected high fuel prices this projection occurred one year sooner. Congress had to approve an emergency \$8 billion transfer to keep the Highway Trust Fund solvent until the next reauthorization bill is enacted.



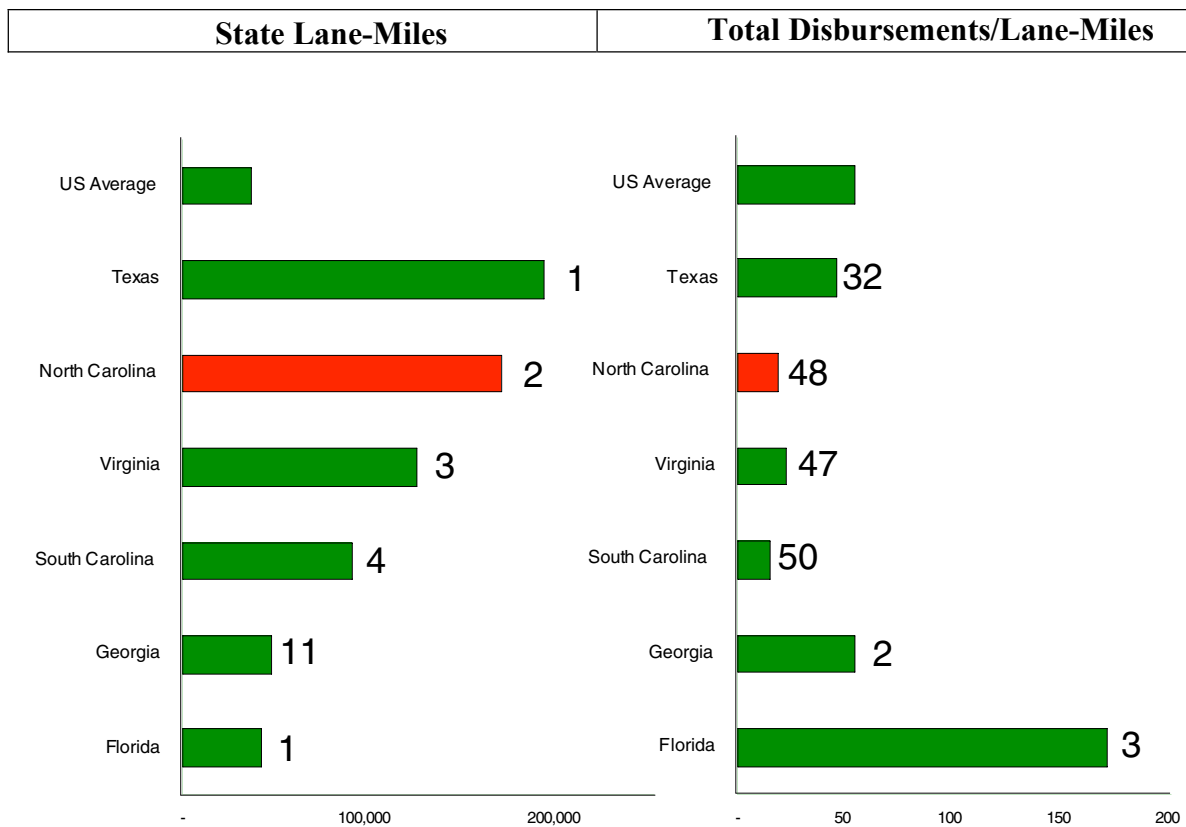
## Mileage

The state's transportation roadway network has grown very little. Approximately 1,400 miles of roadway mileage was added between 1990 and 2006. However, the total number of lane-miles grew by approximately 20,800 during the same time period. The disparity between the miles and lane miles is due to a great number of new roads being more than two lanes wide (urban loops) along with a great number of existing two-lane road roads being widened to accommodate future traffic demands. The small increases in mileage and/or lane-mileage relative to VMT and population has exacerbated congestion and bottleneck problems especially on the statewide tier network of roadways (as seen in the picture below.)



## Mileage (con't)

### Lane Mile Comparison (NC / States / Nation)



North Carolina is second only to Texas in lane mile ownership, however, North Carolina is ranked 40th in state revenue collected to maintain its road system and 48th in the use of revenue from all resources.



## The State Transportation Improvement Program

To fulfill NCDOT's mission and goals, NCDOT developed a State Transportation Improvement Program (STIP) planning document that makes our infrastructure safer, more efficient and more reliable.

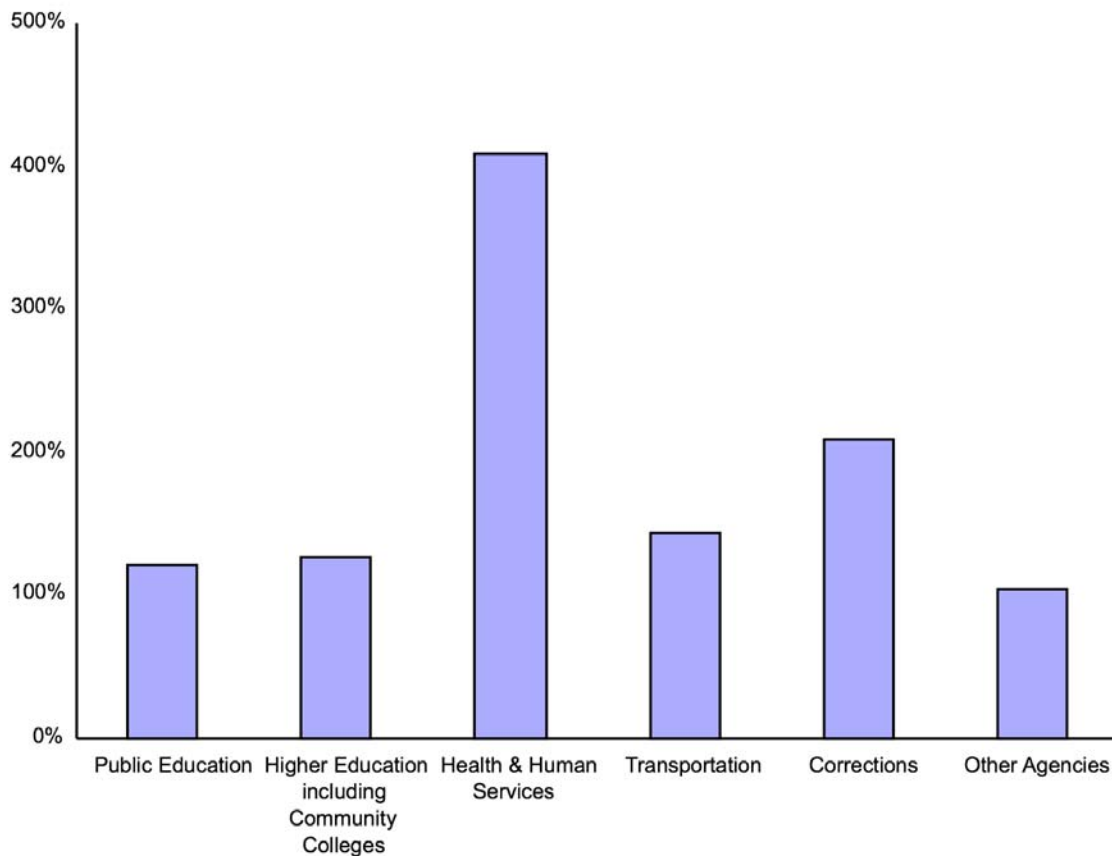
The 2009–2015 STIP funds 2,437 transportation projects totaling about \$13 billion, including funding for the state's highway, public transportation, aviation and Governor's Highway Safety programs. It focuses not only on new construction, but also the maintenance and safety of our existing infrastructure. The document is fiscally sound and balanced according to the equity formula mandated by the state's Highway Trust Fund law. The document includes both "deliverable" and "developmental" components to help stakeholders better gauge funding for various projects.

STATE TRANSPORTATION IMPROVEMENT PROGRAM			
FISCAL YEARS 2009 THRU 2015			
ADOPTED JUNE 2008			
TRANSPORTATION PROGRAM	# OF PROJECTS	\$ in Thousands	
		FY 2009-2015	POST 2015
BICYCLE AND PEDESTRIAN	102	\$ 62,656	\$ 3,500
CONGESTION MITIGATION	72	79,767	
ENHANCEMENT	134	134,404	720
FEASIBILITY STUDIES	38		180,500
FEDERAL BRIDGE	962	1,414,155	472,480
FERRY PROJECTS	16	17,075	33,650
HAZARD ELIMINATION	114	197,238	
INTERSTATE	122	1,702,567	4,283,459
MITIGATION	14		
MUNICIPAL BRIDGE	34	22,645	
PASSENGER RAIL	52	340,523	2,536,917
PUBLIC TRANSPORTATION	502	2,512,151	152,000
ROADSIDE			
ENVIRONMENTAL	34	69,517	9,800
RURAL	416	5,141,093	15,093,745
SAFE ROUTES TO SCHOOLS	2	34,250	
URBAN	361	2,736,762	6,884,111
<b>TOTAL TRANSPORTATION PROGRAM</b>	<b>2,975</b>	<b>\$ 14,464,803</b>	<b>\$ 29,650,882</b>

## Budget: NCDOT Relative to General Fund

Transportation revenues relative to total entire state revenues have decreased 20 percent since 1990. The transportation budget is the fourth largest behind public education, higher education and community colleges combined and the N.C. Department of Health and Human Services as shown in the table below.

Transportation Revenue Growth Since 1990  
Relative to Other State Agencies



## **In Summary**

Transportation is fundamental in continuing North Carolina's prosperity and quality of life as the state's population continues to grow. NCDOT is transforming its workforce to deliver a full-service, multi-modal transportation network more efficiently. To address declining infrastructure health with limited resources, NCDOT continues to seek innovative solutions to meet the state's growing stress on its transportation system.

### **Growing Demand on System**

- Doubling of VMT by 2030
- North Carolina population projected to grow by 50 percent between 2000 and 2030, seventh most populous state by 2030

### **Increasing Cost of Supplies**

- 80 percent construction supplies inflation since 2002
- Spike in global asphalt, cement and steel prices expected to continue

### **Declining Funding**

- State gas tax purchasing power has declined (inflation and miles per gallon)
- Federal Highway Trust Fund program projected to run out of funding by 2009
- Transportation funding flat/declining for FY2008/09
- Gas tax cap and increased other agency support

## **National Infrastructure Health**

Infrastructure Assessment by American Society of Civil Engineers (2006)

### **SUBJECT:**

- |            |    |
|------------|----|
| • AIRPORTS | D  |
| • BRIDGES  | C- |
| • DAMS     | D  |
| • ROADS    | D  |
| • RAIL     | B- |

## VIII. Division Performance Profiles

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Division performance profiles provide detailed information on each division within the Department of Transportation that is tasked with the Program and Asset Management functional area and the Program Delivery functional area. Additional performance and statistical indicators are included for the following divisions:

- Division of Highways
  - Transportation Division One
  - Transportation Division Two
  - Transportation Division Three
  - Transportation Division Four
  - Transportation Division Five
  - Transportation Division Six
  - Transportation Division Seven
  - Transportation Division Eight
  - Transportation Division Nine
  - Transportation Division Ten
  - Transportation Division Eleven
  - Transportation Division Twelve
  - Transportation Division Thirteen
  - Transportation Division Fourteen
- Rail Division
- Division of Public Transportation
- Division of Bicycle and Pedestrian Transportation
- Ferry Division
- Division of Aviation
- Division of Motor Vehicles

### Profile – Division of Highways

The Division of Highways (DOH) is comprised of central and field based functions. DOH includes five functions, Preconstruction, Safety and Mobility, Field Support, Asset Management and Operations, all of which support the delivery of transportation projects statewide.

Together they are responsible for the 79,000 mile state highway system. Planning, programming and engineering for major highway projects are done centrally, while the 14 field offices, known as “Transportation Divisions”, manage the construction of the projects. The Transportation Divisions also maintain and operate the highway system within their geographical boundaries and perform planning and engineering for some smaller projects. The data shown for each Transportation Division are the results of the activities performed by both the central as well as field functions.





## Profile – Transportation Division One

Transportation Division One includes the state highway system for Bertie, Camden, Currituck, Chowan, Dare, Gates, Hertford, Hyde, Martin, Northampton, Tyrrell, Pasquotank, Perquimans and Washington counties.



Division One	
<b>Population</b>	259,475
<b>Road Mileage</b>	5,129
<b>Counties</b>	14

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	35.74	36.00	35.34	34.97	↓
<b>Fatality Rate<sup>2</sup></b>	1.96	2.36	1.75	1.60	↓
<b>Total Fatalities</b>	70	85	62	56	↓
<b>Crash Rate<sup>3</sup></b>	176.31	153.32	153.11	149.46	↓
<b>Total Crashes</b>	6,302	5,519	5,411	5,227	↓
<b>Injury Rate<sup>4</sup></b>	95.32	89.70	80.93	76.72	↓
<b>Total Injuries</b>	3,407	3,229	2,860	2,683	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	15%	n/a	100%	↑
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	55.3%	n/a	61.5%	↑
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	60.8%	n/a	63.7%	↑
<b>Bridge Health<sup>8</sup></b>	n/a	45.0%	n/a	39.2%	↓

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

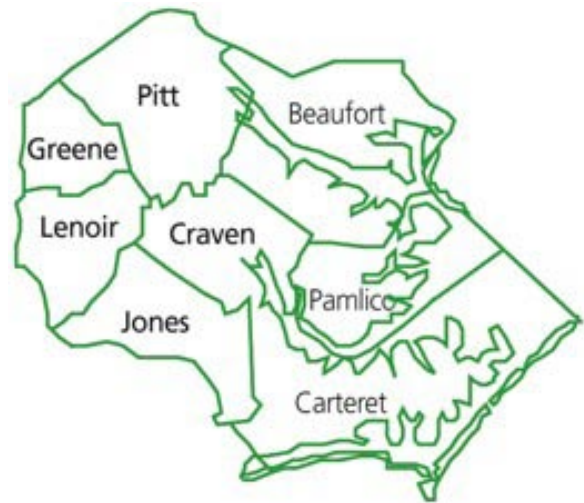
<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Two

Transportation Division Two includes the state highway system for Beaufort, Carteret, Craven, Greene, Jones, Lenoir, Pamlico and Pitt counties.



Division Two	
<b>Population</b>	459,827
<b>Road Mileage</b>	5,006
<b>Counties</b>	8

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	49.82	51.45	51.46	51.39	↑
<b>Fatality Rate<sup>2</sup></b>	1.93	1.50	1.87	1.60	↓
<b>Total Fatalities</b>	96	77	88	82	↓
<b>Crash Rate<sup>3</sup></b>	223.35	213.34	230.44	222.51	↑
<b>Total Crashes</b>	11,126	10,971	11,859	11,435	↑
<b>Injury Rate<sup>4</sup></b>	132.79	122.63	121.70	115.70	↓
<b>Total Injuries</b>	6,615	6,309	6,263	5,946	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	none	n/a	none	n/a
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	63.4%	n/a	63.5%	↔
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	57.3%	n/a	56.8%	↓
<b>Bridge Health<sup>8</sup></b>	n/a	63.7%	n/a	60.1%	↓

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Three

Transportation Division Three includes the state highway system for Brunswick, Duplin, New Hanover, Onslow, Pender and Sampson counties.



Division Three	
<b>Population</b>	626,710
<b>Road Mileage</b>	5,481
<b>Counties</b>	6

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	64.66	66.82	69.10	70.75	↑
<b>Fatality Rate<sup>2</sup></b>	1.73	1.81	1.88	1.98	↑
<b>Total Fatalities</b>	112	121	130	140	↑
<b>Crash Rate<sup>3</sup></b>	247.32	248.25	238.99	225.28	↓
<b>Total Crashes</b>	15,993	16,587	16,514	15,938	↓
<b>Injury Rate<sup>4</sup></b>	146.46	132.96	124.66	114.42	↓
<b>Total Injuries</b>	9,471	8,884	8,614	8,095	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	85.1	n/a	87.7	↑
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	47.1	n/a	48.8	↑
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	67.6	n/a	66.7	↓
<b>Bridge Health<sup>8</sup></b>	n/a	52.4	n/a	55.0	↑

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Four

Transportation Division Four includes the state highway system for Edgecombe, Halifax, Johnston, Nash, Wayne and Wilson counties.



Division Four	
Population	550,584
Road Mileage	6,272
Counties	6

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
Vehicle Miles Traveled <sup>1</sup>	72.69	74.03	74.23	74.64	↑
Fatality Rate <sup>2</sup>	1.87	1.80	2.05	1.67	↓
Total Fatalities	136	133	152	125	↓
Crash Rate <sup>3</sup>	217.83	194.74	208.44	190.48	↓
Total Crashes	15,834	14,416	15,472	14,217	↓
Injury Rate <sup>4</sup>	121.76	104.52	109.66	94.45	↓
Total Injuries	8,851	7,737	8,140	7,049	↓
Interstate Route Pavement Condition <sup>5</sup>	n/a	58.6	n/a	64.6	↑
Primary Route Pavement Condition <sup>6</sup>	n/a	71.9	n/a	59.2	↓
Secondary Route Pavement Condition <sup>7</sup>	n/a	62.4	n/a	69.4	↑
Bridge Health <sup>8</sup>	n/a	61.5	n/a	62.1	↑

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Five

Transportation Division Five includes the state highway system for Durham, Granville, Franklin, Person, Vance, Wake and Warren counties.



Division Five	
<b>Population</b>	1,300,776
<b>Road Mileage</b>	6,437
<b>Counties</b>	7

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	122.89	127.65	131.85	135.70	↑
<b>Fatality Rate<sup>2</sup></b>	1.34	1.16	1.05	1.07	↓
<b>Total Fatalities</b>	165	148	138	145	↓
<b>Crash Rate<sup>3</sup></b>	327.96	302.32	312.86	295.70	↓
<b>Total Crashes</b>	40,302	38,590	41,250	40,127	↓
<b>Injury Rate<sup>4</sup></b>	133.28	121.88	116.38	112.46	↓
<b>Total Injuries</b>	16,378	15,557	15,344	15,261	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	64.7	n/a	81.7	↑
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	67.5	n/a	67.6	↑
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	63.9	n/a	61.8	↓
<b>Bridge Health<sup>8</sup></b>	n/a	69.2	n/a	64.3	↓

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Six

Transportation Division Six includes the state highway system for Bladen, Columbus, Cumberland, Harnett and Robeson counties.



Division Six	
Population	636,330
Road Mileage	6,114
Counties	5

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
Vehicle Miles Traveled <sup>1</sup>	73.36	75.43	74.35	73.52	↓
Fatality Rate <sup>2</sup>	2.45	2.24	2.76	2.22	↓
Total Fatalities	180	169	205	163	↓
Crash Rate <sup>3</sup>	240.96	213.45	239.50	235.68	↓
Total Crashes	17,677	16,100	17,808	17,328	↓
Injury Rate <sup>4</sup>	158.08	133.38	146.06	137.51	↓
Total Injuries	11,597	10,060	10,860	10,110	↓
Interstate Route Pavement Condition <sup>5</sup>	n/a	68.2	n/a	94.5	↑
Primary Route Pavement Condition <sup>6</sup>	n/a	73.0	n/a	74.1	↑
Secondary Route Pavement Condition <sup>7</sup>	n/a	70.7	n/a	71.9	↑
Bridge Health <sup>8</sup>	n/a	47.3	n/a	48.1	↑

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Seven

Transportation Division Seven includes the state highway system for Alamance, Caswell, Guilford, Orange and Rockingham counties.



Division Seven	
<b>Population</b>	846,404
<b>Road Mileage</b>	5,388
<b>Counties</b>	5

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	89.75	90.88	92.40	93.34	↑
<b>Fatality Rate<sup>2</sup></b>	1.56	1.28	1.10	1.67	↑
<b>Total Fatalities</b>	140	116	102	156	↑
<b>Crash Rate<sup>3</sup></b>	245.19	227.36	227.00	216.32	↓
<b>Total Crashes</b>	22,007	20,664	20,975	20,191	↓
<b>Injury Rate<sup>4</sup></b>	132.60	117.54	116.05	111.55	↓
<b>Total Injuries</b>	11,901	10,683	10,723	10,412	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	89.6	n/a	86.7	↓
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	67.7	n/a	62.9	↓
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	67.5	n/a	70.7	↑
<b>Bridge Health<sup>8</sup></b>	n/a	55.0	n/a	56.1	↑

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.



## Profile – Transportation Division Eight

Transportation Division Eight includes the state highway system for Chatham, Hoke, Lee, Montgomery, Moore, Randolph, Richmond and Scotland counties.



Division Eight	
Population	492,404
Road Mileage	6,823
Counties	8

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
Vehicle Miles Traveled <sup>1</sup>	56.45	57.23	57.11	57.33	↑
Fatality Rate <sup>2</sup>	2.13	2.22	2.24	2.06	↓
Total Fatalities	120	127	128	118	↓
Crash Rate <sup>3</sup>	200.76	185.25	203.96	197.77	↓
Total Crashes	11,334	10,601	11,648	11,339	↑
Injury Rate <sup>4</sup>	124.17	107.19	105.06	97.81	↓
Total Injuries	7,010	6,134	6,000	5,608	↓
Interstate Route Pavement Condition <sup>5</sup>	n/a	91.7	n/a	93.2	↑
Primary Route Pavement Condition <sup>6</sup>	n/a	77.2	n/a	76.3	↓
Secondary Route Pavement Condition <sup>7</sup>	n/a	75.0	n/a	73.5	↓
Bridge Health <sup>8</sup>	n/a	64.3	n/a	65.7	↑

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.



## Profile – Transportation Division Nine

Transportation Division Nine includes the state highway system for Davidson, Davie, Forsyth, Rowan, and Stokes counties.



Division Eight	
Population	492,404
Road Mileage	6,823
Counties	8

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
Vehicle Miles Traveled <sup>1</sup>	56.45	57.23	57.11	57.33	↑
Fatality Rate <sup>2</sup>	2.13	2.22	2.24	2.06	↓
Total Fatalities	120	127	128	118	↓
Crash Rate <sup>3</sup>	200.76	185.25	203.96	197.77	↓
Total Crashes	11,334	10,601	11,648	11,339	↑
Injury Rate <sup>4</sup>	124.17	107.19	105.06	97.81	↓
Total Injuries	7,010	6,134	6,000	5,608	↓
Interstate Route Pavement Condition <sup>5</sup>	n/a	91.7	n/a	93.2	↑
Primary Route Pavement Condition <sup>6</sup>	n/a	77.2	n/a	76.3	↓
Secondary Route Pavement Condition <sup>7</sup>	n/a	75.0	n/a	73.5	↓
Bridge Health <sup>8</sup>	n/a	64.3	n/a	65.7	↑

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Ten

Transportation Division Ten includes the state highway system for Anson, Cabarrus, Mecklenburg, Stanly and Union counties.



Division Ten	
<b>Population</b>	1,294,092
<b>Road Mileage</b>	5,013
<b>Counties</b>	5

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	121.21	128.84	132.08	132.73	↑
<b>Fatality Rate<sup>2</sup></b>	1.20	1.23	1.13	1.19	↓
<b>Total Fatalities</b>	146	158	149	158	↑
<b>Crash Rate<sup>3</sup></b>	317.44	287.12	288.71	324.97	↑
<b>Total Crashes</b>	38,476	36,993	38,132	43,133	↑
<b>Injury Rate<sup>4</sup></b>	160.35	142.79	138.99	146.60	↓
<b>Total Injuries</b>	19,436	18,398	18,358	19,458	↔
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	79.4	n/a	92.6	↑
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	65.5	n/a	58.9	↓
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	66.3	n/a	69.1	↑
<b>Bridge Health<sup>8</sup></b>	n/a	73.3	n/a	68.2	↓

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Eleven

Transportation Division Eleven includes the state highway system for Ashe, Alleghany, Avery, Caldwell, Surry, Watauga, Wilkes and Yadkin counties.



Division Eleven	
<b>Population</b>	357,702
<b>Road Mileage</b>	6,053
<b>Counties</b>	8

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	40.85	41.98	41.88	41.57	↑
<b>Fatality Rate<sup>2</sup></b>	1.52	1.60	1.70	1.68	↑
<b>Total Fatalities</b>	62	67	71	70	↑
<b>Crash Rate<sup>3</sup></b>	215.52	198.21	203.35	205.69	↑
<b>Total Crashes</b>	8,804	8,321	8,516	8,551	↓
<b>Injury Rate<sup>4</sup></b>	115.49	103.00	105.19	100.89	↓
<b>Total Injuries</b>	4,718	4,324	4,405	4,194	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	71.1	n/a	82.7	↑
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	75.7	n/a	68.7	↓
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	57.5	n/a	61.3	↑
<b>Bridge Health<sup>8</sup></b>	n/a	71.8	n/a	67.4	↓

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

<sup>3</sup> Total crashes per 100 million vehicles miles traveled

<sup>4</sup> Total injuries per 100 million vehicles miles traveled

<sup>5</sup> Percent of interstate route survey miles that were rated in good or above condition

<sup>6</sup> Percent of total primary route survey miles that were rated in good or above condition. Primary Routes are evaluated biennially.

<sup>7</sup> Percent of total secondary route survey miles that were rated in good or above condition. Secondary routes are evaluated biennially.

<sup>8</sup> Percent of bridges that were rated in good or above condition. Bridges are evaluated biennially. These ratings do not imply safety issues.

## Profile – Transportation Division Twelve

Transportation Division Twelve includes the state highway system for Alexander, Catawba, Cleveland, Gaston, Iredell and Lincoln counties.



Division Twelve	
<b>Population</b>	711,564
<b>Road Mileage</b>	6,115
<b>Counties</b>	6

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	81.34	83.90	85.57	86.79	↑
<b>Fatality Rate<sup>2</sup></b>	1.39	1.37	1.52	1.52	↑
<b>Total Fatalities</b>	113	115	130	132	↑
<b>Crash Rate<sup>3</sup></b>	242.68	218.78	221.22	202.66	↓
<b>Total Crashes</b>	19,739	18,355	18,930	17,588	↓
<b>Injury Rate<sup>4</sup></b>	133.13	123.33	124.14	114.05	↓
<b>Total Injuries</b>	10,828	10,347	10,623	9,898	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	44.6	n/a	52.1	↑
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	65.7	n/a	62.2	↓
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	74.5	n/a	76.5	↑
<b>Bridge Health<sup>8</sup></b>	n/a	79.1	n/a	78.2	↓

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

<sup>2</sup> Total fatalities per 100 million vehicles miles traveled

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## Profile – Transportation Division Thirteen

Transportation Division Thirteen includes the state highway system for Buncombe, Burke, Madison, McDowell, Mitchell, Rutherford and Yancey counties.



Division Thirteen	
<b>Population</b>	476,298
<b>Road Mileage</b>	5,121
<b>Counties</b>	7

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	55.03	56.64	57.87	58.83	↑
<b>Fatality Rate<sup>2</sup></b>	1.62	1.41	1.35	1.31	↓
<b>Total Fatalities</b>	89	80	78	77	↓
<b>Crash Rate<sup>3</sup></b>	199.28	177.45	187.63	174.46	↓
<b>Total Crashes</b>	10,966	10,050	10,858	10,264	↓
<b>Injury Rate<sup>4</sup></b>	122.55	105.48	108.09	101.20	↓
<b>Total Injuries</b>	6,744	5,974	6,255	5,954	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	52.1	n/a	60.2	↑
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	77.0	n/a	80.0	↑
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	65.4	n/a	66.4	↑
<b>Bridge Health<sup>8</sup></b>	n/a	79.2	n/a	69.9	↓

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## Profile – Transportation Division Fourteen

Transportation Division Fourteen includes the state highway system for Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Polk, Swain and Transylvania counties.



Division Fourteen	
<b>Population</b>	338,902
<b>Road Mileage</b>	4,932
<b>Counties</b>	10

	FY 2005	FY 2006	FY 2007	FY 2008	Trend
<b>Vehicle Miles Traveled<sup>1</sup></b>	42.20	43.52	44.32	44.99	↑
<b>Fatality Rate<sup>2</sup></b>	1.90	1.40	1.24	1.20	↓
<b>Total Fatalities</b>	80	61	55	54	↓
<b>Crash Rate<sup>3</sup></b>	169.39	159.59	160.59	157.22	↓
<b>Total Crashes</b>	7,148	6,946	7,117	7,073	↓
<b>Injury Rate<sup>4</sup></b>	94.05	88.09	85.63	81.00	↓
<b>Total Injuries</b>	3,969	3,834	3,795	3,644	↓
<b>Interstate Route Pavement Condition<sup>5</sup></b>	n/a	66.6	n/a	80.4	↑
<b>Primary Route Pavement Condition<sup>6</sup></b>	n/a	62.5	n/a	69.6	↑
<b>Secondary Route Pavement Condition<sup>7</sup></b>	n/a	67.7	n/a	62.8	↓
<b>Bridge Health<sup>8</sup></b>	n/a	82.1	n/a	73.5	↓

<sup>1</sup> Vehicle miles traveled (VMT) times 100 million vehicles miles traveled

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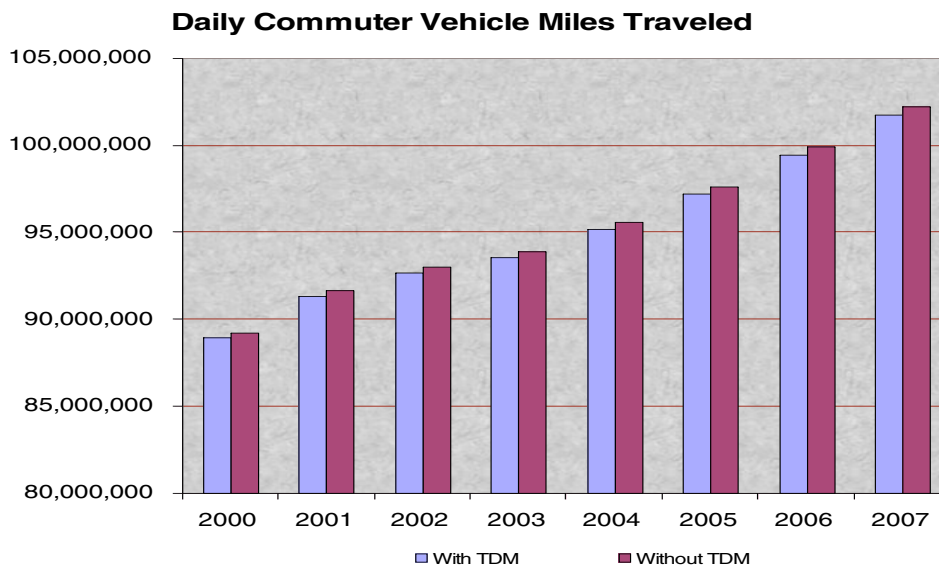
## Profile – Public Transportation Division

NCDOT's Public Transportation Division was created in 1974 by the N.C. General Assembly to foster the development of intercity, urban and rural (now referred to as "community") public transportation in North Carolina. The Division administers federal and state transportation grant programs; provides leadership and training opportunities to transit professionals; makes planning and technical assistance available in an effort to enrich transit services offered to North Carolina citizens; and prepares projections to meet future transit needs.



Urban and intercity buses are easily recognizable, but citizens are sometimes unaware of other public transportation services available in North Carolina. All of the state's 100 counties enjoy some form of public transportation, even in rural areas. North Carolina's community, regional community, urban, regional urban and intercity transportation systems serve more than 50 million passengers each year.

Public Transportation Systems in North Carolina	
Urban Transit Systems	19
Urban Regional Transportation Authorities	2
Small Urban Transit Systems	3
Community/Rural Transit Systems	82
Total Transit Systems in North Carolina	106



What's Transportation Demand Management or TDM? It's the application of strategies and policies to reduce the demand on automobile travel, or to redistribute the travel demand in space or in time.



## Profile – Ferry Division

The mission of the North Carolina Ferry Division is to provide safe, cost-effective and dependable service for the traveling public.

The Ferry Division operates seven routes with 24 ferries and employs over 400 workers. The operations are supported by a full service shipyard, dredge, military-style landing craft utility vehicles, tugs, barges, and other support vessels.



Each year, North Carolina ferries transport over one million vehicles and more than two million passengers across five separate bodies of water - the Currituck and Pamlico sounds and the Cape Fear, Neuse and Pamlico rivers.

### Ferry Routes

- 1 – Currituck : Knotts Island
- 2 – Hatteras : Ocracoke
- 3 – Ocracoke : Swan Quarter
- 4 – Cedar Island : Ocracoke
- 5 – Bayview : Aurora
- 6 – Cherry Branch : Minnesott
- 7 – Southport : Fort Fisher



<b>Ferry Division Transport Statistics</b>	<b>FY 2007 Vehicles Transported</b>	<b>FY 2007 Passengers Transported</b>	<b>FY 2008 Vehicles Transported</b>	<b>FY 2008 Passengers Transported</b>	<b>Trend</b>
JULY	137,242	368,813	145,826	396,931	↑
AUGUST	121,274	316,294	131,984	354,029	↑
SEPTEMBER	92,423	213,184	103,951	241,816	↓
OCTOBER	83,593	183,382	94,303	204,731	↓
NOVEMBER	55,183	114,960	62,343	124,875	↑
DECEMBER	47,032	88,018	47,255	86,306	↔
JANUARY	48,239	85,053	41,851	71,320	↓
FEBRUARY	41,764	74,072	42,271	75,894	↓
MARCH	63,637	125,994	65,590	136,140	↑
APRIL	85,291	199,705	77,844	168,111	↔
MAY	101,227	231,688	101,131	231,395	↔
JUNE	128,884	334,929	119,069	313,940	↓
<b>TOTAL</b>	<b>1,005,789</b>	<b>2,336,092</b>	<b>1,033,418</b>	<b>2,405,488</b>	<b>↑</b>

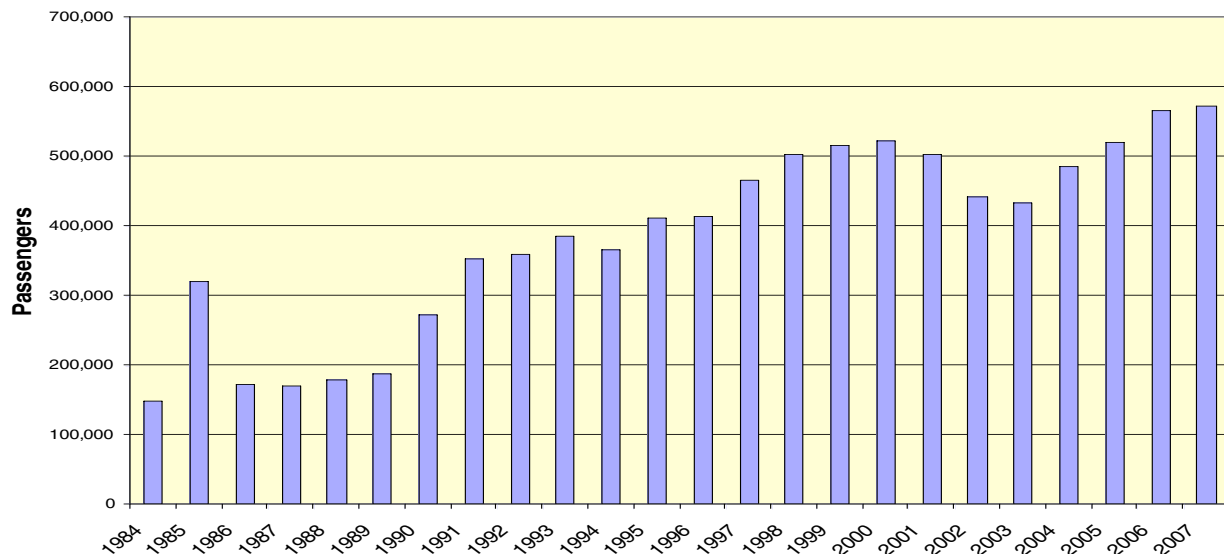
## Profile – Rail Division

North Carolina has 3,684 miles of railroad tracks throughout the state. Those tracks provide an efficient and environmentally friendly form of transportation. There are two types of trains that operate in the state; passenger trains and freight trains. The Rail Division works with communities across the state to make rail-highway crossings safer by installing traffic-control devices, closing and consolidating crossings, and separating dangerous intersections by constructing bridges over and under railroad tracks.



The North Carolina Department of Transportation's Rail Division sponsors two passenger trains, the Carolinian and Piedmont. The north bound Carolinian departs Charlotte every morning and ends its trip in New York City. The south bound Carolinian train leaves New York City each morning and arrives in Charlotte in the early evening. The Piedmont train carries passengers from Raleigh to Charlotte and back everyday. Combined, the Carolinian and Piedmont carry more than 200,000 passengers each year.

**Intercity Rail Ridership History**



## Profile – Division of Bicycle and Pedestrian Transportation

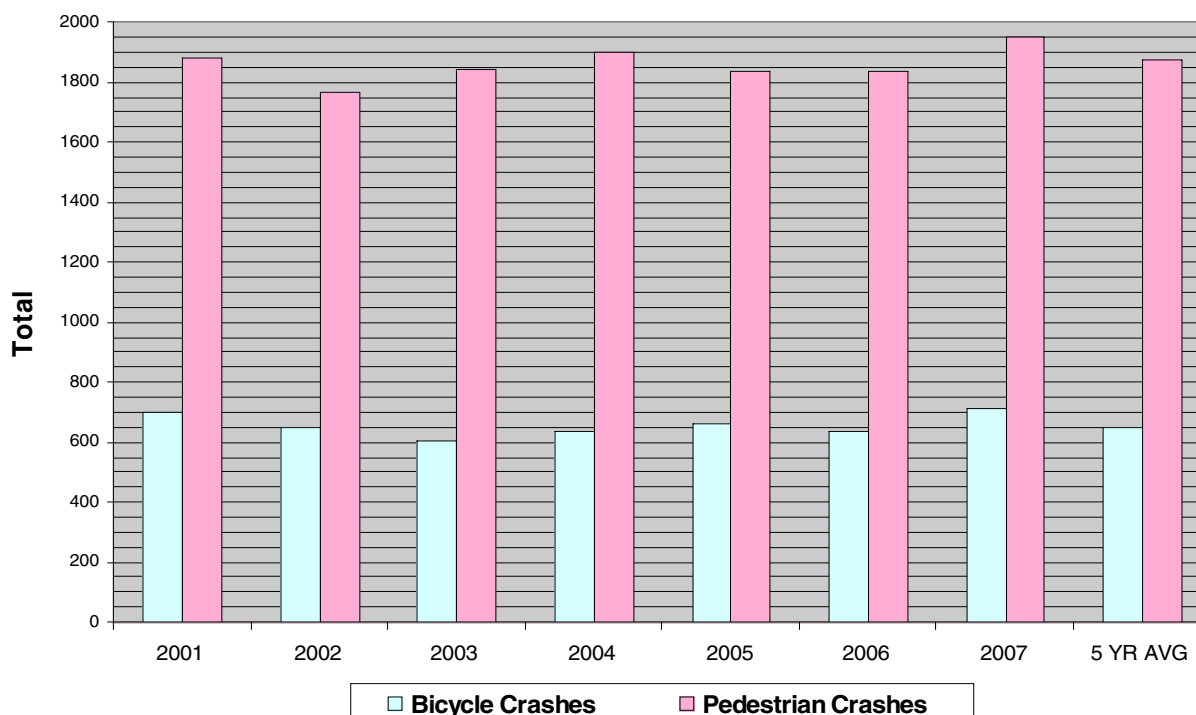
The Division of Bicycle and Pedestrian Transportation (DBPT) is a comprehensive operation, touching all aspects of bicycling and walking; whether designing facilities, creating safety programs, mapping cross-state bicycle routes, training teachers, sponsoring workshops and conferences, fostering multi-modal planning or integrating bicycling and walking into the ongoing activities of the Department of Transportation. Created in 1974 as a result of North Carolina bicycle program legislation and expanded to encompass pedestrian activities in 1992 as a result of federal legislation, the DBPT is the oldest comprehensive state program of its kind in the United States.



Bikes on Public Transportation

Opportunities to combine bike travel with public transportation have increased in North Carolina, including bike racks on trains and busses.

**Bicycle/Pedestrian to Motor Vehicle Crashes**



## Profile – Division of Aviation

The mission of the Division of Aviation is to promote the economic well being of North Carolina through air transportation system development and improved aviation safety and education.

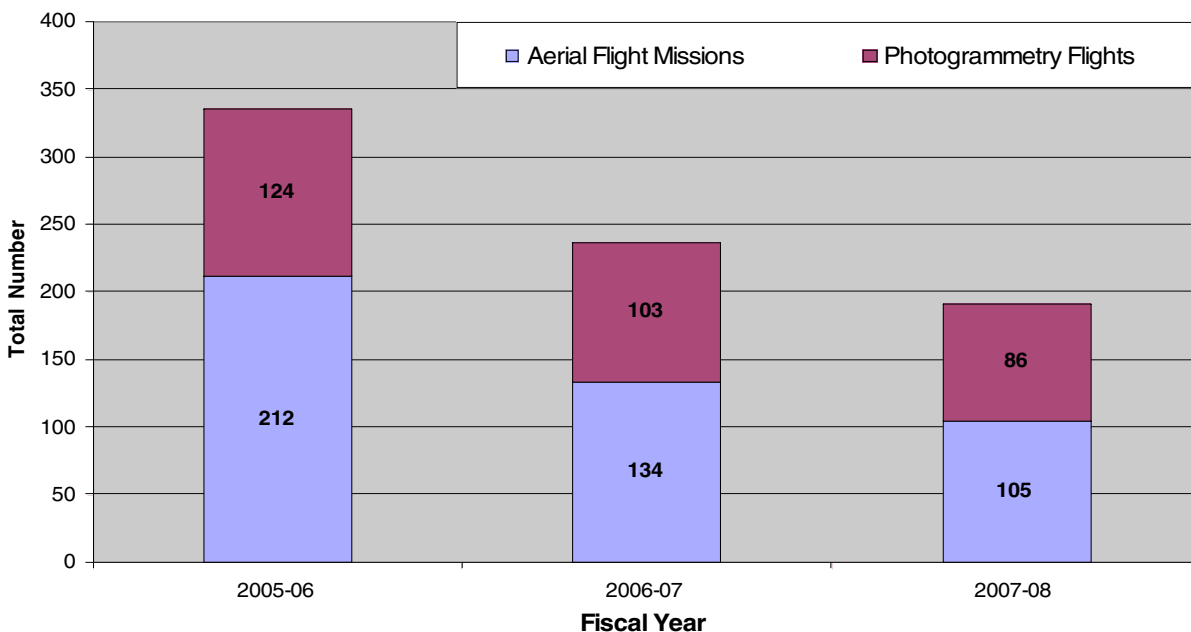
The Division is responsible for all aviation functions regarding state system planning, airport and aviation system development, and provides funding to communities for constructing and improving airports throughout the state.

North Carolina has 74 publicly-owned airports and nearly 300 privately-owned airports. Nine airports have regularly scheduled airline service; four are international. There are more than 7,000 registered aircraft based in the state and 15,000 licensed pilots. More than 47 million passengers fly to and from North Carolina each year and more than 800 million pounds of air freight originate annually in the state.



The Division of Aviation works with the Department's Photogrammetry Unit to acquire aerial photographs and produce digital spatial information products used for transportation planning design, construction, and maintenance. Two Cessna Conquest II aircraft are equipped with the latest in Global Positioning System equipment for navigation, and control of aerial photography missions.

**Division of Aviation - Aerial Flights**



## Profile – Division of Motor Vehicles

The mission of the DMV is to deliver quality motor vehicle services, promote highway safety, and furnish timely and accurate information by providing excellent customer service, enforcing motor vehicle laws, and maintaining the integrity of official DMV records.



### Key Accomplishments

- \$1.3 billion of revenue collected in FY08
- Establishment and organization of the new Hearings Section as a truly independent unit within the Division that provides every citizen who may be negatively impacted by a DMV administrative decision the full opportunity to be heard and to present evidence bearing on that decision in a quasi-judicial proceeding before a trained, competent, professional and independent hearing official who will render a fair and impartial decision.
- The Vehicle Registration Section continued its license plate recall program, which was funded by the General Assembly. During the past fiscal year, 441,632 plates have been recalled with another 50,000 anticipated to be recalled on an annually recurring basis.
- The total number of currently certified school bus drivers in FY08 was 41,777. There were 11,428 school bus drivers trained in that time period. The total number of driver education instructors trained and certified was 626. Restricted instructional permits issued during FY 08 were 103,644.
- Motorist emission compliance is over 92% in areas that have been surveyed by the Division of Air Quality.

DMV Statistics	FY 2006	FY 2007	FY 2008	Trend
Licensed Drivers	6,217,000	6,340,000	6,513,000	↑
Registered Vehicles	8,401,000	8,518,000	8,545,000	↑
Titles Processed	2,920,000	2,888,000	2,777,000	↓
Plates/Stickers Requested	9,700,000	9,500,00	9,201,000	↓
Internet Renewals	1,028,927	1,252,338	1,389,207	↑
Graduated Licenses Issued	215,218	213,396	211,518	↓
Learner's Permits Issued	67,077	73,899	59,285	↓
Duplicate Licenses Issued	689,579	740,939	740,148	↓
Renewals Issued	912,644	937,951	953,689	↑
Original Licenses Issued	341,670	337,066	348,074	↑

